AGENDA

CITY COUNCIL
REGULAR MEETING

REGULAR JOINT MEETING WITH THE CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ORANGE COUNTY GREAT PARK BOARD SPECIAL MEETING

September 12, 2017
4:00 PM
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

Donald P. Wagner
Mayor/Chairman

Lynn Schott
Mayor Pro Tempore/Vice Chair

Melissa Fox
Councilmember/Boardmember

Jeffrey Lalloway
Councilmember/Boardmember

Christina Shea
Councilmember/Boardmember

Donald P. Wagner
Chairman

Melissa Fox
Vice Chairwoman

Jeffrey Lalloway
Director

Lynn Schott
Director

Christina Shea
Director

Speaker's Card/Request to Speak: If you would like to address the City Council/Board of Directors on a scheduled agenda item – including a Consent Calendar item, a Regular Council Business item, a Public Hearing item, or Public Comments – please complete the Request to Speak Form. The card is at the table at the entrance to the City Council Chamber. Please identify on the card your name and the item on which you would like to speak and return to the City Clerk. The Request to Speak Form assists the Mayor/Chair in ensuring that all persons wishing to address the City Council/Board of Directors are recognized. It also ensures the accurate identification of meeting participants in the City Council minutes. Your name will be called at the time the matter is heard by the City Council. City policy is to limit public testimony to up to three minutes per speaker depending on relevant circumstances (unless the time limit is extended by the Mayor/Chair), which includes the presentation of electronic or audio visual information. Speakers may not yield their time to other persons.

Please take notice that the order of scheduled agenda items below and/or the time they are actually heard, considered and decided may be modified by the Mayor/Chair or the City Council/Board of Directors during the course of the meeting, so please stay alert.

Scan this QR code for an electronic copy of the City Council//Successor Agency Regular Meeting and OC Great Park Special Meeting Agenda and staff reports.

CALL TO ORDER - CITY COUNCIL MEETING AND JOINT MEETING WITH THE SUCCESSOR AGENCY

ROLL CALL

1. CLOSED SESSION

1.1 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Deputy City Manager; Jimmee Medina, Deputy Director of Administrative Services; Brian King, Manager of Human Resources; Peter Brown, Liebert, Cassidy, Whitmore; and Employee Organization: Irvine Police Association (IPA)

RECONVENE TO THE CITY COUNCIL MEETING

PLEDGE OF ALLEGIANCE

INVOCATION

2. PRESENTATIONS

2.1 Proclaim September 2017 as "Hunger Action Month"

CITY MANAGER'S REPORT

- **Southern California Edison Safari Substation Update**

ANNOUNCEMENTS

Announcements, Committee Reports and Council/Agency Comments are for the purpose of presenting brief comments or reports, are subject to California Government Code Section 54954.2 of the Brown Act and are limited to 15 minutes per meeting.

CONVENE TO THE SPECIAL MEETING OF THE ORANGE COUNTY GREAT PARK BOARD

ROLL CALL

3. CONSENT CALENDAR

3.1 MINUTES

ACTION:
Approve the minutes of the regular meeting of the Orange County Great Park Board held on July 25, 2017.

3.2 RESOLUTIONS CONTAINING TERMS AND CONDITIONS OF EMPLOYMENT FOR REPRESENTED AND NON-REPRESENTED EMPLOYEES

ACTION:

1) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
2) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
3) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
4) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

5) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
6) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
7) Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

ADJOURNMENT - ORANGE COUNTY GREAT PARK BOARD SPECIAL MEETING

CONVENE TO THE REGULAR JOINT MEETING

ADDITIONS AND DELETIONS

Additions to the agenda are limited by California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda and must be acted upon prior to the next City Council meeting.

4. CONSENT CALENDAR - CITY COUNCIL

All matters listed under Consent Calendar are considered by the City Manager to be routine and enacted by one roll call vote. There will be no discussion of these items unless members of the City Council request specific items to be removed from the Consent Calendar for separate discussion. Any member of the public may address the Council on items on the Consent Calendar. See information for Speaker's Card/Request to Speak on first page.

4.1 MINUTES

ACTION:
Approve the minutes of a regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency held on August 8, 2017.

4.2 PROCLAMATIONS/COMMENDATIONS

ACTION:
Proclaim the following:

1) September 17-23, 2017 as "National Forensic Science Week."
2) September 2017 as "Childhood Cancer Awareness Month."
3) September 2017 as “Prostate Cancer Awareness Month.”
4) September 2017 as "World Alzheimer's Awareness Month."

Ratify the following:

5) Proclaim September 17-23 as "Constitution Week."
6) Commend California State University, Fullerton on its 60th Anniversary.
7) Commend Public Broadcasting Service of Southern California on its 45th Anniversary.
8) Commend United Service Organizations on its 76th Anniversary.

4.3 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

4.4 CITY OF IRVINE INVESTMENT POLICY FOR CALENDAR YEAR 2018

ACTION:
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY’S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2018

4.5 RESOLUTIONS CONTAINING TERMS AND CONDITIONS OF EMPLOYMENT FOR REPRESENTED AND NON-REPRESENTED EMPLOYEES

ACTION:

1) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

2) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
3) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
4) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
5) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
6) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
7) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017
8) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING FULL-TIME POSITIONS IN ACCORDANCE WITH THE PROVISIONS OF COMPENSATION RESOLUTIONS AND THE OPERATING BUDGET FOR THE 2017-18 FISCAL YEAR, AND SUPERSEDING RESOLUTION NO. 17-45, WHICH IS INCONSISTENT THEREWITH

9) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING THE SALARY GRADE ORDER STRUCTURE AND SALARY RANGES FOR EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 17-46, WHICH IS INCONSISTENT THEREWITH

4.6 GREEN RIBBON ENVIRONMENTAL COMMITTEE WORK PLAN AND COMMUNITY CHOICE ENERGY STUDY

ACTION:

1) Approve the Green Ribbon Environmental Committee Work Plan.
2) Direct staff to initiate a study to analyze the feasibility of implementing a Community Choice Energy program in Irvine.

4.7 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR UNIVERSITY DRIVE WIDENING BETWEEN MACARTHUR AND CAMPUS

ACTION:

1) Approve the construction plans, specifications and contract documents for the widening of University Drive between MacArthur and Campus, Capital Improvement Project 311306.
2) Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorize the City Manager to execute the Reimbursement Agreement with Irvine Ranch Water District for installation and adjustment of water facilities within the project area.
4) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

4.8 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR LANDSCAPE REHABILITATION

ACTION:

1) Approve the construction plans, specifications and contract documents for the Landscape Rehabilitation Capital Improvement Projects 351501 and 351601.
2) Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

4.9 NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN IRVINE BUSINESS COMPLEX AND CYPRESS VILLAGE

ACTION:
Receive and file.

4.10 SECOND READING AND ADOPTION OF ORDINANCE TO ESTABLISH CHANGES AND ADDITIONS TO POSTED SPEED LIMITS

ACTION:
Read by title only, second reading and adoption of ORDINANCE NO. 17-06 - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

(Unless otherwise directed by a Member of the City Council, the vote at second reading will reflect the same vote as at first reading. However, if a Councilmember was absent at first reading, his or her vote cast at second reading will be reflected. If a Councilmember is not present at the second reading/adoption, the vote will be reflected as absent.)

4.11 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

1) Approve Councilmember Shea's request for Community Partnership Fund Grant nominations to Crime Survivors in the amount of $500 and Tender Touch Ministries in the amount of $1,000 both in support of program costs.
2) Approve Mayor Pro Tem Schott's request for Community Partnership Fund Grant nomination to Cloud Church, Inc. in the amount of $1,500 in support of the Cloud School of Leadership.
3) Authorize the City Manager to prepare and sign the funding agreements listed in Action 1 and 2.

5. CONSENT CALENDAR - SUCCESSOR AGENCY

All matters listed under Consent Calendar are considered by the Executive Director to be routine and enacted by one roll call vote. There will be no discussion of these items unless members of the Agency request specific items to be removed from the Consent Calendar for separate discussion. Any member of the public may address the Agency on items on the Consent Calendar. See information for Speaker's Card/Request to Speak on first page.

5.1 MINUTES

ACTION:
Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on August 8, 2017.

5.2 WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ACTION:
Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

PUBLIC COMMENT - SUCCESSOR AGENCY (LIMITED TO 3 MINUTES PER SPEAKER)

Any member of the public may address the Successor Agency on items within the Successor Agency's subject matter jurisdiction but which are not listed on this agenda during Public Comments; however, no action may be taken on matters that are not part of the posted agenda. See information for Speaker's Card/Request to Speak on the first page.

ADJOURNMENT - JOINT MEETING WITH THE SUCCESSOR AGENCY

RECONVENE TO THE CITY COUNCIL MEETING

6. PUBLIC HEARINGS

Public Hearings are scheduled for a time certain of 4:00 p.m., unless noticed otherwise, or as soon thereafter as possible. Those wishing to address the City Council during the Public Hearing are requested to complete a form and provide it to the City Clerk prior to the hearing.
Notice: Public Hearings listed for continuance will be continued as noted and posting of this agenda serves as notice of continuation. Any matter not noted for continuance will be posted separately.

6.1 ANNUAL COMMUNITY DEVELOPMENT BLOCK GRANT AND HOME INVESTMENT PARTNERSHIPS GRANT END-OF-YEAR PROGRESS REPORT TO THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

ACTION:

1) Receive staff report.
2) Open the public hearing, receive public input.
3) Close the public hearing.
4) City Council comments and questions.
5) Receive and file the Consolidated Annual Performance and Evaluation Report and authorize submission to the U.S. Department of Housing and Urban Development.

6.2 IRVINE BUSINESS COMPLEX TRANSPORTATION MITIGATION FEE PROGRAM UPDATE

ACTION:

1) Receive staff report.
2) Reopen the public hearing receive public input.
3) Close the public hearing.
4) City Council comments and questions.
5) Adopt RESOLUTION NO. - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE UPDATED IRVINE BUSINESS COMPLEX (PA 36) TRANSPORTATION MITIGATION PROGRAM, INCLUDING AN UPDATE TO THE TRAFFIC IMPROVEMENT FEE PROGRAM FOR THE IRVINE BUSINESS COMPLEX, PURSUANT TO SECTION 9-36-14 OF THE ZONING ORDINANCE AND A MINOR MODIFICATION TO MITIGATION MEASURE 13-1 IN THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE 2010 IBC VISION PLAN ENVIRONMENTAL IMPACT REPORT

6.3 CITY COUNCIL OVERRIDE OF INCONSISTENCY DETERMINATION BY THE AIRPORT LAND USE COMMISSION OF ORANGE COUNTY

ACTION:

1) Reopen the public hearing.
2) Continue the public hearing to the October 24, 2017 meeting.

6.4 CONSIDERATION OF AN ORDINANCE GRANTING NONEXCLUSIVE FRANCHISES FOR COMMERCIAL SOLID WASTE COLLECTION

ACTION:

1) Receive staff report.
2) Open the public hearing; receive public input.
3) Close the public hearing.
4) City Council comments and questions.
5) Introduce for first reading and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING NONEXCLUSIVE FRANCHISES FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES, FOR THE PERIOD OF OCTOBER 27, 2017 THROUGH AUGUST 31, 2026

7. COUNCIL BUSINESS

7.1 TREASURER'S REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2017

ACTION:

Receive and file the Treasurer's Report for the fiscal year ended June 30, 2017.

PUBLIC COMMENT - CITY COUNCIL - Public comments will be heard at approximately 6:30 p.m. or prior to adjournment, whichever occurs earlier.

Any member of the public may address the City Council on items within the City Council's subject matter jurisdiction but which are not listed on this agenda during Public Comments; however, no action may be taken on matters that are not part of the posted agenda. See information for Speaker's Card/Request to Speak on the first page.

ADJOURNMENT - CITY COUNCIL

NOTICE TO THE PUBLIC

LIVE BROADCASTING AND REBROADCASTING

Regular City Council/Successor Agency meetings are broadcast live every 2nd and 4th Tuesday of the month at 4 p.m. and are replayed on Tuesdays at 4 p.m. (in weeks in which there is not a live City Council/Successor Agency meeting), Sundays at 11 a.m., Wednesdays at 7 p.m., and Thursdays at 7 p.m. until the next City Council meeting. Regular Orange County Great Park Board meetings are broadcast live every 4th Tuesday of the month at 2 p.m. and are replayed on Wednesdays at 8 p.m., Thursdays at 10 a.m., and Saturdays at 7 p.m. (in weeks in which there is not a live Orange County Great Park meeting) until the next Orange County Great Park Board meeting. All broadcasts can be viewed on Cox Communications Local Access Channel 30 and U-Verse Channel 99. City Council/Successor Agency meetings are also available via live webcast and at any time for replaying through the City's ICTV webpage at cityofirvine.org/ictv. For more information, please contact the Clerk of the Board/City Clerk's office at (949) 724-6205.

STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the City Clerk/Clerk of the Board and are available for public inspection and copying once the agenda is publicly posted, (at least 72 hours prior to a regular City Council/Successor Agency/Great Park Board meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org* and the Orange County Great Park website at *ocgp.org* beginning the Friday prior to the scheduled City Council/Successor Agency/Orange County Great Park Board meeting on Tuesday.

In addition, meetings can be viewed live at the time posted on the agenda and related staff reports can be opened and viewed simultaneously along with the streaming of the meeting. To view the meeting, go to *cityofirvine.org/ictv*.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk/Clerk of the Board staff at (949)724-6205.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the City Council/Successor Agency/Orange County Great Park Board regarding any item on this agenda after the posting of the agenda will be available for public review in the City Clerk/Clerk of the Board's Office, One Civic Center Plaza, Irvine, California, during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk/Clerk of the Board staff at (949)724-6205.

SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

Media Types and Guidelines

1. Written Materials/Handouts:

   Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the City Council/Successor Agency/Orange County Great Park Board. Please provide 15 copies of the information to be submitted and file with the City Clerk/Clerk of the Board at the time of arrival to the meeting. This information will be disseminated to the City Council/Successor Agency/Orange County Great Park Board at the time testimony is given.

2. Large Displays/Maps/Renderings:

   Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the City Clerk/Clerk of the Board's Office at (949)724-6205 no later than 12:00 noon on the day of the scheduled meeting so that an easel can be made available, if necessary.

3. Electronic Documents/Audio-Visuals:

   Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Public Information Office (PIO) no later than 12:00 noon on the day of the scheduled meeting. To facilitate your request contact the PIO Office at (949)724-6253 or the City Clerk's Office at (949)724-6205.

Information must be provided on CD, DVD, or VHS; or, emailed by 12:00 noon on the day of the scheduled meeting to pio@ci.irvine.ca.us. Members of the public will be asked to provide their name, identify the meeting and the agenda item to be addressed, and a day time phone number.

The PIO office will notify the person submitting the information as soon as possible prior to the meeting if the information cannot be accessed or if the version provided is incompatible with the City's system. Every effort will be made by City staff to facilitate the presentation.

CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans With Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the City Clerk/Clerk of the Board's Office at (949)724-6205.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

CHALLENGING CITY DECISIONS

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitations period is specified by any other provision. Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge that is not filed within this 90-day period will be barred.

If a person wishes to challenge the nature of the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of Irvine, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

COMMUNICATION AND ELECTRONIC DEVICES

To minimize distractions, please be sure all personal communication and electronic devices are turned off or on silent mode.

MEETING SCHEDULE

Regular meetings of the City Council/Successor Agency are held on the second and fourth Tuesdays of each month at 4:00 p.m. Study Sessions and/or Closed Sessions are periodically held prior to the start of the regular meeting. Regular meetings of the Orange County Great Park Board are held on the fourth Tuesday of each month at 2:00 p.m. Agendas are available at the following locations:

- City Clerk/Clerk of the Board's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at www.ci.irvine.ca.us
- Orange County Great Park web page at www.ocgp.org

I hereby certify that the agenda for the Regular City Council meeting, Regular Joint Meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency, and Special Meeting of the Orange County Great Park Board was posted in the posting book located in the Public Safety Lobby of City Hall, One Civic Center Plaza, Irvine, California on September 7, 2017 by 8:00 pm as well as on the City's and Orange County Great Park's web page.

Molly McLaughlin, MPA
City Clerk
Secretary, Successor Agency
Secretary/Clerk of the Board, Orange County Great Park

CLOSED SESSION

1.1

PRESENTATIONS

2.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: PRESENTATIONS

City Clerk

RECOMMENDED ACTION:

Proclaim September 2017 as "Hunger Action Month"

CITY OF IRVINE

Proclamation

HUNGER ACTION MONTH
SEPTEMBER 2017

WHEREAS, hunger and poverty are issues of grave concern, with 315,000 people, including 129,000 children, at risk of hunger each month in Orange County; and

WHEREAS, Second Harvest Food Bank of Orange County serves 250,000 people each month and although a record 21.6 million meals were distributed to the hungry last year, nearly 70,000 people still cannot get food when they need it; and

WHEREAS, September is Hunger Action Month, when the Feeding America nationwide network of food banks, including Second Harvest Food Bank of Orange County, work to mobilize the public and help to end hunger in their communities; and

WHEREAS, the following companies in Irvine are significantly supporting Second Harvest Food Bank and taking action to end hunger: Albertsons, Golden State Foods, Mazda Foundation, Orange County Produce, Orange County United Way, Stanbridge University, and University of California Irvine.

NOW THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM SEPTEMBER 2017 as HUNGER ACTION MONTH** and affirms the City's commitment to taking steps to raise awareness about the need to combat hunger in our community.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

3.1

REQUEST FOR BOARD ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: MINUTES

Secretary / Clerk of the Board

RECOMMENDED ACTION:

Approve the minutes of a regular meeting of the Orange County Great Park Board held on July 25, 2017.

MINUTES

ORANGE COUNTY GREAT PARK BOARD REGULAR MEETING

July 25, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

A regular meeting of the Orange County Great Park Board of Directors was called to order on July 25, 2017 at 2:07 p.m. in the City Council Chamber; Chairman Wagner presiding.

ROLL CALL

Present:	5	Director:	Jeffrey Lalloway
		Director:	Lynn Schott
		Director:	Christina Shea
		Vice Chairwoman:	Melissa Fox
		Chairman:	Donald P. Wagner

PLEDGE OF ALLEGIANCE

Vice Chairwoman Fox led the Pledge of Allegiance.

DIRECTOR, OCGP, REPORT

Pete Carmichael, Director, Orange County Great Park, provided a brief update on construction progress and forward planning.

BOARDMEMBER REPORTS

1. PRESENTATIONS

1.1 Request by Director Shea for Presentation by Laguna Greenbelt, Inc. Regarding Wildlife Corridor

This item was agendized at the request of Director Shea, who expressed concern about the development of the County's 100-acre site adjacent to the Orange County Great Park and its potential impact to the Wildlife Corridor.

Darlene Nicandro, Interim Manager of Planning Services, and Mary Fegraus, representing Laguna Greenbelt, provided the presentation and responded to questions.

Board discussion included: working collaboratively with the Orange County Board of Supervisors regarding the development of its 100-acre site adjacent to the Orange County Great Park; noted the mitigation by the County of the segment of the Wildlife Corridor north of Irvine Blvd.; whether any communication between the County and Laguna Greenbelt, Inc. had taken place with respect to the development of the County's 100-acre site; and whether concerns raised by Laguna Greenbelt had been expressed during the environmental review period.

ADDITIONS AND DELETIONS

There were no additions or deletions to the agenda.

2. CONSENT CALENDAR

ACTION: Moved by Director Shea, seconded by Vice Chairwoman Fox, and unanimously carried to approve Consent Calendar Item Nos. 2.1 through 2.3.

2.1 MINUTES

ACTION:
Approved the minutes of a regular meeting of the Orange County Great Park Board held on June 27, 2017.

2.2 BUDGET ADJUSTMENT FOR ENHANCEMENTS TO SPORTS PARK SUBAREA OF THE ORANGE COUNTY GREAT PARK

ACTION:

1) Recommended that the City Council authorize the City Manager to execute Amendment No. 3 to Letter Agreement regarding Sports Park design enhancements.
2) Recommended that the City Council approve a budget appropriation of $71,000 from the unallocated Great Park Fund balance to the Capital Improvement Project Fund, Project No. 361616, Sports Park Subarea Improvements, for the recommended Sports Park design enhancements.

2.3 AWARD OF CONTRACT FOR WIRELESS MARKETING AND MANAGEMENT SERVICES AT THE ORANGE COUNTY GREAT PARK

ACTION:

1) Recommended that the City Council authorize the Orange County Great Park Director to execute a contract with 5 BARS Communities, LLC for wireless marketing and management services and subsequent sublicenses at the Orange County Great Park.
2) Recommended that the City Council approve a budget adjustment to appropriate $85,000 in the Orange County Great Park Fund for a wireless infrastructure master plan funded from future lease revenue.

3. BOARD BUSINESS

3.1 CONSIDERATION OF VICE CHAIRWOMAN FOX'S REQUEST TO GRANT LAND AT THE CULTURAL TERRACE TO PRETEND CITY CHILDREN'S MUSEUM

This item was agendized at the request of Vice Chairwoman Fox, who spoke in support of entering into a Memorandum of Understanding (MOU) with Pretend City and the purpose in doing so; and noted that the request for an MOU was not to grant land, but rather, to move the process forward in tandem with the design phase of the Cultural Terrace.

Pete Carmichael, Director, Orange County Great Park, presented the staff report and responded to questions.

Chairman Wagner and City Manager Joyce clarified the intent of the recommended actions.

The following individuals spoke in support of granting land at the Cultural Terrace to Pretend City Children's Museum:

Sandra Bolton, Executive Director of Pretend City
Erin Boyl, Board Chair, Pretend City Children's Museum
Kelly Pijl, Communications and Policy Director, Children & Families Commission of Orange County
Janice Lee
Samantha Sparks, Pretend City Volunteer

The following individuals spoke in support of granting land to Pretend City, as well as additional space for botanical gardens at the Cultural Terrace:

Patricia Mortz
Virginia Bickford
Jane Olinger

Board discussion included: noting that granting land to Pretend City at this point in time would be premature; expressed concern about equity and fairness to other entities interested in space at the Cultural Terrace; discussed the potential for moving forward with other interested stakeholders that have committed to securing funding; suggested milestones and fundraising targets be included in the MOU; requested that Pretend City provide a business plan to the Board for review and consideration; clarified the recommended action; expressed concern about setting a tone that the planning of the Cultural Terrace was based on a piecemeal approach; noted the Board's history of approving MOUs with other entities; noted the City's longstanding history with Pretend City; questioned the needs and commitment from the City to secure funding; suggested taking a systematic approach to planning the Cultural Terrace; requested further clarification of the terms of the MOU; reiterated that the proposed MOU was only a good-faith commitment to review and negotiate proposed terms; noted fiscal challenges in assisting entities with costs related to operations and maintenance; expressed concern about dedicating a specific site and acreage at this time; and suggested using the Ice Rink MOU as the template for future MOUs.

Jeff Melching, Board Counsel, clarified the core terms and purpose of the proposed MOU.

ACTION: Moved by Vice Chairwoman Fox, seconded by Director Shea, and unanimously carried to:

> Direct the City Attorney and City staff to negotiate a Memorandum of Understanding with Pretend City along the terms specified by the Great Park Board of Directors and return to the City Council for its consideration and action at the first City Council meeting in August.

3.2 UPDATE ON PREPARATIONS FOR COMPLETION AND TURNOVER OF PHASE ONE OF THE SPORTS PARK

Chris Koster, Manager of Great Park Planning & Development; Ed Crofts, Community Services Manager – Great Park; and Manual Gomez, Director of Public Works, provided the staff report and responded to questions.

Board discussion included questioning whether the United State Tennis Association (USTA) had shown an interest in using the tennis complex for qualifying tournaments and pro circuit events.

Received and filed.

3.3 CONSIDERATION OF CHAIRMAN WAGNER'S REQUEST FOR RECONSIDERATION OF STREET NAMES PREVIOUSLY APPROVED BY THE GREAT PARK BOARD OF DIRECTORS

This item was agendized at the request of Chairman Wagner, who noted a desire to reconsider recently approved street names (Greyhawk, Wolfpack, Warhorse and Flying Tiger) based on feedback from retired Marines who served at the Former El Toro Marine Corps Air Station (El Toro).

Bill Kogerman, retired Lieutenant Colonel, spoke in support, noting that the above-referenced street names were not squadrons out of El Toro.

Christian DeFries also spoke in support, reiterating the importance of El Toro and its impact on Orange County's history.

Board discussion included: noting the importance of paying tribute to those who served and preserving the history of El Toro; reiterated the commitment to the Museum of Heritage and Aviation (MoHA); and suggested providing a permanent historical exhibit at the Cultural Terrace reflective of El Toro's history.

ACTION: Moved by Chairman Wagner, seconded by Director Lalloway, and unanimously carried to:

Replace the previously approved street names of Greyhawk, Wolfpack, Warhorse, and Flying Tiger, to:

Skyhawk
Corsair
Phantom
Hornet

PUBLIC COMMENTS

Blair Dickerson spoke in support of the BMX Track.

Christine Comp and Katrina Kirkelay spoke in support of a botanical garden at the Orange County Great Park.

Don Croucher, representing the California Fire Museum, spoke in support of a fire museum at the Orange County Great Park.

ADJOURNMENT

Moved by Director Lalloway, seconded by Vice Chairwoman Fox, and unanimously carried to adjourn the meeting at 4:15 p.m.

_____
CHAIRMAN

_____ September 12, 2017
SECRETARY/CLERK OF THE BOARD DATE

3.2

REQUEST FOR BOARD ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: RESOLUTIONS CONTAINING TERMS AND CONDITIONS OF EMPLOYMENT FOR REPRESENTED AND NON-REPRESENTED EMPLOYEES

Director of Administrative Services

City Manager

RECOMMENDED ACTION

1. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

2. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

3. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

4. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

5. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

6. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

7. Recommend the City Council adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

EXECUTIVE SUMMARY

The negotiation team for the City has reached tentative agreement on the Memorandums of Understanding (MOUs) with the Associated Supervisory/Administrative Personnel (ASAP), Irvine City Employees Association (ICEA), Irvine Professional Employees Association (IPEA), and Irvine Police Management Association (IPMA). All agreements will be effective August 11, 2017 upon expiration of the previous MOUs.

The terms of the new two-year agreements provide for base salary increases in each year of the contracts.

Other recommended actions include: adoption of resolutions for non-represented full-time employees providing the same changes in terms and conditions of employment as those provided for the represented employees, and updates to the resolution covering part-time employees.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The negotiating team for the City and representatives of ASAP, ICEA, IPEA, and IPMA bargaining units reached tentative agreements on terms and conditions of employment.

These tentative agreements have been ratified by the membership of each bargaining group and MOUs reflecting those agreements are now pending approval by the City Council (Attachments 1-4).

- The term of each proposed MOU is two years, effective August 11, 2017 through June 30, 2019. They provide two percent base salary increases in each of the two years.

- The agreements with ASAP, ICEA and IPEA provide for a paid Holiday Leave Benefit of three days.

- The agreement with IPMA provides for a City contribution of 1.25 percent of base salary towards a retiree health savings account.

- All agreements include minor modifications in terminology and procedure that reflect current law and practice.

- Resolutions governing the terms and conditions of employment for non-represented full-time employees contain the same provisions as the MOUs for non-sworn employees (Attachments 5-6).

- The resolution governing terms and conditions of employment for part-time employees provides for a two percent base salary increase in each of the two years and paid Holiday Leave Benefit of three days for extended part-time staff (Attachment 7).

ALTERNATIVES CONSIDERED

The City is required by the State's labor-relations law (Meyers-Milias-Brown Act) to meet and confer in good faith with recognized employee organizations. The terms of the proposed MOUs reflect agreements reached by the parties through the meet-and-confer process. The City Council may choose not to approve the agreements; however, the tentative agreements reached with ASAP, ICEA, IPEA, and IPMA representatives are within the parameters set by the City Council and have been ratified by the membership of each group.

FINANCIAL IMPACT

The additional cost associated with implementation of the recommended MOUs and resolutions for employees whose salaries are allocated to the Great Park is up to $50,000 annually for Fiscal Year 2017-18 and Fiscal Year 2018-19. Staff will try to manage budgeted resources within this year's adopted budget to adjust to the cost of salaries and benefits that were not included in the budget. If additional funding is needed, staff will present a mid-year budget adjustment for Great Park Board consideration.

REPORT PREPARED BY Brian King, Human Resources Manager

ATTACHMENTS

1. Resolution Adopting ASAP MOU
2. Resolution Adopting ICEA MOU
3. Resolution Adopting IPEA MOU
4. Resolution Adopting IPMA MOU
5. Confidential Resolution
6. Management and Non-Represented Resolution
7. Part-Time Resolution

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Associated Supervisory/Administrative Personnel (ASAP) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and ASAP have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and ASAP was adopted by the City Council pursuant to Resolution No. 15-74.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and ASAP is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 1

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL

AND

CITY OF IRVINE

AUGUST 11, 2017 – JUNE 30, 2019

EXHIBIT A

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Article 1 – Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq.) and City Resolution No. 341, for the purpose of memorializing the Agreement reached between the City and Associated Supervisory/Administrative Personnel (ASAP) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation, and understanding between the City and its employees.

Article 2 – Recognition

ASAP is hereby acknowledged as the exclusive Recognized Employee Organization representing the full-time employees in the classifications listed in Attachment I (Supervisory/Administrative personnel).

Article 3 – Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation, and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the ASAP. Further, the purpose of this Agreement is to guarantee employees represented by ASAP all rights and privileges of employment provided in Federal and State law, and City ordinances.

Article 4 – Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement, provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer, and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend, or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

Employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3502. Neither the City nor ASAP shall interfere with, intimidate, restrain, coerce, or discriminate against employees who exercise their rights under this Agreement or the law.

Article 7 - Association Rights

ASAP shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members and Departmental Representatives.

The City shall provide ASAP, if changes occur, with the following: A list of employees in the classifications set forth in Attachment I; the names of new hires, promotions, and terminations in the classifications set forth in Attachment I; City of Irvine job postings; and copies of current salary schedules. The City will provide ASAP with names and home addresses of all ASAP-represented employees. This information is for the confidential use of ASAP and the City shall not be responsible and will be held harmless by ASAP for inappropriate release of this

information by ASAP. Upon written request, the ASAP shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of ASAP to post notices relating to matters of interest to ASAP and to the employees.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

Designated ASAP representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of attending meetings called by Management or to participate in established City committees, such as but not limited to, Citywide Insurance Committee, Defined Contribution Pension Plan Committee and Safety Committee.

Designated ASAP representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances. Grievances shall be processed in accordance with the Personnel Rules and Regulations unless noted herein.

ASAP representatives may have access to ASAP members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work. In order to allow ASAP an opportunity to handle the business affairs of its members, the City shall, at the beginning of the calendar year, establish a time bank of one-hundred and eighty (180) hours to be used by board members as authorized by the ASAP Board for training, grievances, board meetings, etc. ASAP agrees the effective operation of the City departments is not to be adversely affected by the use of the time bank by ASAP members. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings, and/or attendance at special meetings called by the City shall not be charged against the time bank.

At the orientation of new employees, a City-approved ASAP informational packet will be provided to those who would be eligible to join ASAP. In addition, ASAP and/or its representative will be provided with the opportunity to have 10-minute access to employees in ASAP-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by ASAP under the authority of a membership application signed by each participating employee which shall be approved by ASAP and remitted promptly to the Payroll Office.

Article 9 - Quarterly City-ASAP Meetings

The City's designated management staff shall meet with the ASAP President, representative and ASAP board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to resolve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary actions in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Salary

A. Position Classification to Salary Grades

The classification of individual positions to pay grades is the City's sole responsibility and will be based upon the Human Resources' evaluation of the classification using a point factor system.

B. Classification Requests

During the period designated by Human Resources each year, an employee may request a reevaluation of position responsibilities by submitting a new Comprehensive Position

Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's Department Director and manager (if applicable) will review the request and make a recommendation, which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1 of the following fiscal year.

C. Pay Progression in a Salary Grade

Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay progression will be provided according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or Equal to Maximum Range		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

1. Probationary Merit Reviews

   Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary period. All subsequent performance reviews will be conducted according to the same merit schedule as other regular employees. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

D. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

E. Severance

In the event a member of the ASAP bargaining unit is laid-off from his/her employment with the City, without the opportunity to voluntarily demote into a lower position or transfer into a comparable position, due to the contracting-out of a City service, the City will provide a severance. The severance will be equivalent to forty (40) hours of pay, at their current base hourly rate of pay, for every year of full-time City service, rounded to the nearest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual's current elected coverage levels and insurance providers, payable through the end of the month in which severance expires.

Article 11 - Bilingual Pay

Department Directors shall annually designate which positions should be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

   An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

Article 12 – Benefits

The City will provide a cafeteria-style benefit program for supervisory/administrative employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

1. Employees not claiming dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

   Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

B. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions:

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, he total cost to the City for medical, dental, psychological, and vision insurance shall not exceed $694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by

the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

C. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XIII, item B., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XIII, item B., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

D. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential impacts from or modifications to the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and ASAP.

E. Insurance Committee

The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with claims history, and with proposed changes in rates or coverage.

F. Pension

1. CITY OF IRVINE DEFINED CONTRIBUTION PENSION PLAN:

The provisions of this Section F. shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

a. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Employees shall become fifty percent (50%) vested in such plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

b. The City will deduct an amount equal to 6.552 % of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elected to remain in the City of Irvine DCPP.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present or future, as provided under section F of this article. Employees, who elected to remain in the City of Irvine DCPP, shall continue participation until the employee terminates his/her employment from the City for any reason.

d. The City will utilize retirement plan forfeitures to offset the cost of City of Irvine DCPP account management and administrative fees.

2. CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM PLAN (CALPERS):

The provisions of this section F shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program and employees hired after that date.

a. The City's contract with CalPERS shall include the following options:
   i. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   ii. One Year Final Compensation (Cal. Govt. Code Section 20042)
   iii. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost
   iv. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
   v. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
   vi. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

b. All employees hired on or after the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Article XIII, Section F

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule shall apply (Cal. Govt. Code Section 21060).

f. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.

g. Effective April 14, 2012 the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

h. All "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Voluntary Employee's Beneficiary Association (VEBA), which shall be established and administered by the Association.

2. Employees participating in the ASAP VEBA shall contribute an amount equal to one percent (1%) of base salary.

3. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

4. The City will allow for a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of the retired employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

5. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves

to another representation unit, the City will contribute an amount up to the contribution established for the new units' retiree health plan and the employees will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to the current full year's base salary rounded up the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated on 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to Job Share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129.

Article 13 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Directors to make an informed decision and a summary of how necessary coverage and current service levels will be improved or maintained. Approved alternate

work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences that are in excess of one week.

In an emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require that the employee work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a 14-calendar day notice. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered on a case-by-case basis.

Article 14 - Annual Physical Examination

The City shall reimburse employees up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 15 - Leaves

A. Vacation

Employees shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	3 weeks (120 hours)	5 weeks (200 hours)
After 3 through 10	4 weeks (160 hours)	6 weeks (240 hours)
After 10 or more	5 weeks (200 hours)	7 weeks (280 hours)

When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay. The dates an employee may take his/her vacation shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more holidays as defined in this MOU fall within a vacation leave, such holidays shall be charged as a holiday.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if:

Employees must notify their supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave, whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave. The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay at the time of cash out. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month. Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or the designated department contact prior to or the time set for beginning his/her daily duties, or as may be specified by the director of his/her department. When absence is for one (1) work day or more, the employee may be required to file a physician's certificate with the Personnel Officer.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Manager.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

D. Personal Sick Leave Conversion

Regular employees shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused Personal Sick Leave in excess of one-hundred and sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of Personal Sick Leave, except that employees with at least ten years of full-time consecutive service shall be eligible to convert sick leave at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One-hundred and sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave credits to vacation hours.

Regular full-time employees having less than ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 180 hours of sick leave per employee per year. Regular full-time employees with at least ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 120 hours of sick leave per employee per year. Conversion requests can be made only in whole hour increments that are evenly divisible by the conversion ratio, subject to a sixty (60) hour maximum after conversion. Conversion requests shall be submitted on appropriate forms as determined by the Personnel Officer. The annual election period and payment period shall be designated and announced by Administrative Services annually.

A regular full-time employee with less than ten (10) years or more continuous service may convert any accrued and unused sick leave to vacation hours at a ratio of 3 to 1 at the normal base rate of pay. A regular full-time employee who has a minimum of ten (10) years or more of full-time continuous service may convert any accrued and unused sick leave to vacation hours at the ratio of 2 to 1 at the normal base pay rate. In this situation, the employee may exceed his/her vacation accrual limits. This paragraph shall not apply to employees who separate due to termination for cause; or who resign or retire in lieu of being terminated after he/she has received a notice of intent to terminate for cause.

E. Personal Leave

Effective the pay period which includes January 1st of each year employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the pay period which includes January 1, employees have any of this leave on the books, with the first full pay period beginning in January, they will be provided with whatever amount of leave is necessary to bring their bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year.

The immediate family shall be defined as the spouse, registered domestic partner, children, step children, parents, brothers, sisters, step siblings, grandparents,

grandchildren, parents-in-law, grandparents in law or other individuals whose relationship to the employee is that of a dependent or a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee or a person who had an *in loco parentis* relationship with the employee (the employee stood *in loco parentis* to the person.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed one-hundred and eighty (180) calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child to the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Jury Duty

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If unit members are required to be absent from work to report for jury duty, they will notify their supervisor of the absence as soon as possible after finding out that they must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

Employees who are scheduled for a swing or graveyard shift on a day they are called to jury service will be authorized to change their work hours in order to report to jury service.

Employees who are called to jury duty will not be subject to working their full graveyard or swing shift if there is not a minimum of 10 hours before or after assigned jury duty. If there is less than 10 hours between the end of a shift and the start of jury duty, employees will be permitted to leave their shift early to allow for a minimum break of 10 hours. If there is less than 10 hours between the end of jury duty and the start of their shift, employees will be able to delay their usual start time to ensure a 10 hour break in between. In this event, the employee's usual end time will remain the same. For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

I. Military Leave

Employees shall be entitled to such benefits as are provided in state and federal law. An employee requesting such military leave shall present a copy of his/her military orders to his/her Department Director prior to the beginning of the leave.

J. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

2. The employee shall accrue sick leave or vacation leave during the time the employee is receiving Industrial Accident Salary Continuance ;

3. The employee's condition is not permanent and stationary as determined by the City appointed physician.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

K. Administrative Leave

Effective the first pay period beginning in January of each year, employees will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for supervisory/administrative employees appointed during the calendar year. The dates an employee may take his/her administrative leave shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not accrue from year to year nor be paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the pay period which includes January 1, employees have any of this leave on the books, with the first full pay period beginning in January, they will be provided with whatever amount of leave is necessary to bring their bank up to 40 hours,

L. Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

Article 16 – Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day After Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

Regular full-time employees shall receive nine (9) hours pay for holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays.

If a holiday falls on an employee's regularly scheduled day off, the employee will receive holiday pay for the holiday or may take off another day during the pay period with approval of his/her supervisor.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of premium overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted paid time off, in lieu of pay, within the pay period in which the holidays fall. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees will be provided with three days of paid leave to be used in the pay period(s) that include the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated "Holiday Leave" days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

For years subsequent to 2018:

Administrative Services will designate and announce the dates on which the above referenced "Holiday Leave" days shall be observed.

Article 17 - Educational Reimbursement/Professional Development

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, hotel and meal expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

Article 18 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least twenty-four (24) hours in advance, with Human Resources staff.

A copy of any commendations, written warnings or reprimands, disciplinary actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee. The employee shall have an opportunity to respond in writing to documents placed in the file. This response will be filed with the original document.

Written reprimands shall be retained at least one (1) year. If after one (1) year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 19 - Non Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under State, or Federal law governing employment or equal employment opportunity. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and the right to join ASAP.

Article 20 - Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and

effect. Should any change be made in any State or Federal law, or in an rules and regulations implementing such legislation, or in any City Charter provision which would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The parties hereto shall meet-and-confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 21 - Completion of the Meet and Confer Process

Each of the parties hereto agrees that it has had a full and unrestricted right to meet, advance, and discuss all matters properly within the scope of meet-and-confer, in accordance with State laws and local ordinances and regulations. The express provisions of this Agreement constitute the only limitations upon the City's right to determine, implement, supplement, change, modify or discontinue in whole or in part any term or condition of employment the City deems fit and appropriate; provided, however, that the City shall comply with all Federal and State laws relating to employee rights, opportunities, and benefits.

Article 22 – Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of August 11, 2017.

CITY OF IRVINE	ASSOCIATED SUPERVISORY/ ADMINISTRATIVE PERSONNEL
By _____	By _____
By _____	By _____
By _____	By _____
By _____	By _____
	By _____

ATTACHMENT I
CLASSIFICATIONS REPRESENTED BY
ASAP

POSITION TITLE	PAY GRADE
Administrative Coordinator	9
Animal Care Administrator	16
Animal Care Center Supervisor	12
Animal Care Volunteer Program Supervisor	12
Animal Services Supervisor	12
Applications/Programmer Analyst	14
Aquatics Supervisor	12
Assistant City Clerk	14
Assistant City Engineer	18
Building Inspection Supervisor	14
Business Administrator	17
Business Services Administrator	16
Buyer	9
Capital Improvement Program Administrator	18
Code Enforcement Supervisor	14
Communications Bureau Supervisor	14
Community Development Project Administrator	19
Community Services Administrator	18
Community Services Superintendent	16
Community Services Supervisor	12
Construction Inspection Supervisor	14
Crime Analyst	11
Deputy Building Official	19
Emergency Management Administrator	16
Environmental Programs Administrator	18
Executive Coordinator	10
Executive Secretary	9
Facilities Construction Administrator	16

Facilities Maintenance Superintendent	17
Facilities Maintenance Supervisor	12
Finance Administrator	16
Finance Officer	18
Fleet Services Superintendent	17
Fleet Services Supervisor	12
FOR Families Specialist	10
Forensic Supervisor	14
GIS Supervisor	16
Great Park Project Administrator	18
Great Park Property Administrator	18
Information Technology Administrator	20
Landscape Maintenance Superintendent	17
Landscape Maintenance Supervisor	12
Management Analyst I	11
Management Analyst II	13
Media Services Coordinator	11
Municipal Records Administrator	14
Neighborhood Services Administrator	18
Open Space Administrator	16
Permit Services Supervisor	14
Press Information Officer, IPD	16
Principal Plan Check Engineer	18
Principal Planner	17
Project Development Administrator	18
Public Information Officer	16
Public Safety Records Supervisor	11
Public Safety Technology Analyst	14
Public Safety Traffic Programs Supervisor	11
Public Works Administrator	18
Purchasing/Contracts Administrator	16
Real Property Administrator	18
Regulatory Affairs & Business Desk Supervisor	12
Senior Buyer/Contracts Coordinator	11
Senior Crime Analyst	13
Senior Management Analyst	15

Senior Media Services Coordinator	13
Social Services Supervisor/Counselor	12
Special Programs Administrator	16
Street Maintenance Superintendent	17
Street Maintenance Supervisor	12
Supervising Information Specialist	11
Supervising Traffic Systems Specialist	12
Supervising Transportation Analyst	15
Supervisor of Accounting Services	14
Transit Programs Administrator	16
Treasury Specialist	11
Veterinary Practice Manager	12

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine City Employees Association (ICEA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and ICEA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the ICEA was adopted by the City Council pursuant to Resolution No. 15-75.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and ICEA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 2

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE CITY EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

EXHIBIT A

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MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE CITY EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 to June 30, 2019

Article 1 - Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq) and City Resolution No. 341, for the purpose of memorializing the Agreements reached between the City and Irvine City Employees Association (ICEA) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation and understanding between the City and its employees.

Article 2 - Recognition

ICEA is hereby acknowledged as the exclusive Recognized Employee Organization representing the employees in the classifications listed in Attachment I (Full-time**,** hourly, non -sworn, non-confidential employees).

Article 3 - Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the ICEA.

Article 4 - Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement; provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; and (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

The City shall not hinder, interfere, intimidate, restrain, discriminate, coerce, or discipline any employee for exercising any rights or benefits provided in this Agreement or law.

Article 7 - Association Rights

ICEA shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members, and Departmental Representatives. The City shall provide ICEA on a monthly basis, if changes occur, with the following: A list of employees in the classifications set forth in Attachment 1; the names of new hires, promotions, and terminations in the classifications set forth in Attachment 1; City of Irvine job postings; and copies of current salary schedules. On a quarterly basis, the City will provide ICEA with names and home addresses of all ICEA-represented employees. This information is for the confidential use of ICEA and the City shall not be responsible and will be held harmless by ICEA for inappropriate release of this information by ICEA. Upon written request, the ICEA shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of ICEA to post notices relating to matters of interest to ICEA and to the employees. Areas will include the employee lounge, one locked bulletin board at the Operations Support Facility, and one coffee/copy center in each major department.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

A designated ICEA representative shall be entitled to leave his/her work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances.

ICEA staff may have access to ICEA members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work.

In order to allow the Association an opportunity to handle the business affairs of its members, the City shall, at the beginning of each calendar year, establish a time bank of 220 hours to be used by board members as authorized by the Association president, for training, grievances, board meetings, etc. The Association agrees the effective operation of the City departments are not to be adversely affected by the use of the time bank by the association members. No overtime will be paid for an employee to fill in for another using the time bank. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings and/or attendance at special meetings called by the City shall not be charged against the time bank.

The City shall allocate office space to ICEA in the Civic Center at no cost to ICEA. At the orientation of new employees, a City-approved ICEA informational packet will be provided to those who would be eligible to join ICEA. In addition, ICEA and/or its representative will be provided with the opportunity to have 10-minute access to employees in ICEA-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by ICEA under the authority of a membership application signed by each participating employee, which shall be approved by ICEA and remitted promptly to the payroll office.

Article 9 - Quarterly City-ICEA Meetings

The City's designated management staff shall meet with the ICEA President, representative and ICEA board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to solve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary action in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by

mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Complaint Resolution Procedure

A. Purpose

To enhance communications between employees and supervisors and management by providing employees a process for the review of complaints or concerns not covered by the grievance process within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Complaint Resolution Procedure

A complaint may be filed for alleged violation of any personnel rule or regulation not grievable under Article XI Grievance Procedure or alleged unfair treatment of an employee. Complaints involving alternative work schedules or promotional recruitments would appropriately fall under this procedure.

C. Complaint Resolution Procedure

Any complaint or concern not covered by the grievance process shall be resolved as follows:

1. The employees shall first attempt to resolve the matter with his/her immediate supervisor within seven (7) calendar days from the date the employee had notice of the action that he/she believes constitutes a complaint.

2. In the event that the immediate supervisor does not resolve the matter to the employee's satisfaction within fourteen (14) calendar days of the employee's presentation of the matter, then the employee may bring the matter to the attention of the next level of authority (i.e., the immediate supervisor’s direct supervisor) within fourteen (14) calendar days of the receipt of response from the immediate supervisor.

3. If the next level of authority does not resolve the matter to the employee's satisfaction within fourteen (14) calendar days of the employee's presentation of the matter then the employee may bring the matter in writing to the attention of the Department Director, within fourteen (14) calendar days of receiving a response.

4. If the complaint is not resolved by the Department Director to the satisfaction of the employee within fourteen (14) calendar days of the Department Director's receipt of the written complaint, the employee may request in writing, review of the complaint by the City Manager's office. The employee shall present his/her complaint in writing, summarizing efforts to resolve the complaint and a copy of the Department Director's response. The City Manager shall consider the matter and make a final decision.

5. In the case of an incident of serious unfair treatment of an employee, which is not resolved through the Complaint Resolution Procedure, the employee may file a formal grievance with his/her department director within appropriate time frames.

Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 11 - Grievance Procedure

A. Purpose

The purpose of the grievance procedure is to enhance communications between employees and employer by providing a fair and impartial review and consideration of grievances within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Grievance Procedure

A grievance may be filed by an employee for the alleged violation of any personnel rule or regulation related to mandatory subjects of bargaining and not specifically reserved to the City in the City Rights Clause, Article V; for the alleged violation of a section of this Agreement; or alleged violation of commonly accepted safety practices or procedures, or a dispute over an annual performance evaluation rating received by an employee with an overall rating of needs development, or unsatisfactory. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations or in lieu of the Complaint Resolution Procedure - Article X. It shall not be used in matters resulting from disciplinary action or other appeal procedures that exist in accordance with the Personnel Ordinance and Resolution.

Any matter being grieved by an employee will be kept confidential by immediate supervisors and higher-level authorities except in conjunction with the investigation of the grievance.

C. Informal Grievance Adjustment

An employee who believes an alleged violation of matters subject to the grievance process has occurred shall first be required to exhaust the informal grievance level prior to filing a formal grievance. The employee shall have fourteen (14) calendar days from the date the employee had notice of the alleged violation that he/she believes constitutes a grievance.

The informal grievance level shall consist of the employee verbally informing his/her immediate supervisor, or next higher level of supervision if the employee's grievance is with that supervisor, of the alleged violation. The supervisor to whom the verbal grievance is made shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days. Any matters for which he/she does not have authority to make a decision should be brought to the attention of a higher-level supervisor who does have the proper authority.

If the employee is not satisfied with the decision reached through the informal discussion, he/she may bring the matter to the attention to the next level of authority (i.e., the immediate supervisor's direct supervisor) within fourteen (14) calendar days of the immediate supervisor's response. The next level of authority shall have fourteen (14) calendar days to reply. If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply.

In incidents involving disputes of the Agreement with an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal.

D. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in Agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing (Form No. 20-33) to their Department Director, with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee). The Department Director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievance is not satisfied with the decision at the Department Director level, the grievant may appeal the decision to the Assistant City Manager or his/her designee, within fourteen (14) calendar days of receipt of

the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at a previous level, and a clear, concise statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the Department Director.

The Assistant City Manager or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Assistant City Manager may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Assistant City Manager, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration Procedure

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Assistant City Manager's decision to submit a request in writing to the Assistant City Manager for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitration which shall be provided for hereinafter. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service (SMCS) to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The order of striking shall be determined by mutual agreement or flipping a coin

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees for witnesses and conferees, or the costs for witnesses and conferees, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issue and the arbitrator's decision on arbitrability cannot be challenged by the City or overturned.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City Policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days to all parties the written findings and advisory recommendations that he/she has prepared.

The City Manager shall have the authority to accept the recommendation of the advisory arbitrator in whole, or in part, or reject the recommendation entirely and formulate his/her own decision on the grievance. The decision of the City Manager shall be provided to all parties within thirty (30) calendar days.

The City Manager has the power to render a final decision of a grievance, which shall be binding on all parties. If, upon review, the City

Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision.

b. City Manager Review

If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Assistant City Manager's decision, may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

E. General Conditions

1. A formal grievance on interpretations/actions of this Agreement, not involving a specific supervisor or Department Director may be submitted directly to the Personnel Officer or his/her designee. The decision of the City Manager on Agreement disputes shall not restrict an employee from other avenues of appeal available under law.

2. The Personnel Officer shall receive and retain copies of all written material pertaining to the grievance.

3. At any step of the informal grievance adjustment or formal grievance procedure, a Department Director, supervisor, or employee may request a representative of the Human Resources Office to participate in any discussion which may take place.

4. Grievance may be initiated only by the concerned employee or group of concerned employees or ICEA.

5. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

6. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, it shall be assumed that the grievance has been settled on the basis of the last decision reached.

7. If management fails to respond within any of the time limits specified in this policy; the employee may proceed to the next level as if management responded on the last day possible.

8. Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 12 - Disciplinary Action

A. Disciplinary Authority

The Department Director shall have the right, with reasonable cause, to demote, dismiss, reduce in pay or accrued leaves or suspend without pay for up to thirty (30) calendar days any regular (i.e., passed probation) member of the unit.

B. Disciplinary Procedure

Upon determination that some form of discipline should be imposed upon an employee, the Department Director or his/her designee shall provide the employee with written notice, which includes the components listed below.

1. The proposed action to be taken.

2. The charges on which the proposed action is based, including all relevant written materials, written reports, and documents which support these charges.

3. The proposed date on which the disciplinary action will take place.

4. The fact that the employee is entitled to respond to the charges either orally or in writing to the Department Director at least seven (7) calendar days after receipt of notification. If the written notice has been issued by the Department Director, the employee may direct his/her response to the Personnel Officer. Failure of the employee to make a written or oral response of request will constitute waiver of the right to respond.

5. If the employee elects to respond in person, a meeting shall be conducted at which the employee shall be given the opportunity to respond to the charges. The meeting shall be held by the Department Director or the Personnel Officer in those instances where the written notice has been issued by the Department Director. The employee shall be entitled to be represented by counsel or other person of his/her choosing during the course of the above proceeding.

6. After following the above procedure, the Department Director shall prepare the written notice of decision to be served personally upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The City shall have the right to place any employee on paid administrative leave pending investigation and processing of any potential disciplinary action. The provisions of this Article shall not apply to reductions in pay that are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal

When formal disciplinary action of dismissal, demotion, reduction in pay, accrued leaves or suspension without pay for three (3) or more days has been taken pursuant to this Article, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or accrued leaves or suspended without pay for three (3) or more days may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

3. Hearing Procedure

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary action imposed pursuant to this Article. In case of termination, however, the Association may request a Hearing Officer be selected from a list provided by the State Mediation and Conciliation Service (SMCS). The parties shall request the SMCS to supply a panel of seven (7) names of persons experienced in hearing disciplinary cases for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Hearing Officer. The order of striking shall be determined by mutual agreement or flipping a coin. The Hearing Officer will not be an employee of the City of Irvine. If the Association requests a Hearing Officer from the SMCS, the costs of the Hearing Officer's services shall be equally divided by the Association and the City.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The Department Director shall first present his/her witnesses and

evidence to sustain the charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the Department Director and the employee, or their respective designees, may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other relevant records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charge the Hearing Officer sustains or does not sustain and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee. However, in the event the City rejects the recommendation of the Hearing Officer to reverse a termination decision, the City will bear the entire costs of the Hearing Officer.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

4. Appeal Procedure for Suspensions of Less Than Three (3) Days and Reductions of Accrued Leaves Equivalent to less than Three (3) Days

a. A member of the unit who has received a reduction of accrued leaves of less than three days (3) or who has been suspended without pay for less than three (3) days, may appeal to the Department Director, or in the event the discipline has been issued by the Department Director, the Personnel Officer within seven (7) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing.

b. Hearing Procedure:

- At least seven (7) calendar days prior to the hearing, both parties shall provide a list of witnesses and/or exhibits to the Department Director or Personnel Officer.
- During the hearing, the Department Director or Personnel Officer shall hear and consider the evidence, witnesses, and/or exhibits from both parties.

- The Department Director or Personnel Officer may grant a continuance for any reason he/she believes to be important to reaching a fair decision.

- The Department Director or Personnel Officer shall consider all evidence and shall base his/her findings on the preponderance of evidence. He/she shall render his/her decision as soon as possible after the conclusion of the hearing, but in no event later than fourteen (14) calendar days after conducting the hearing, unless agreed to by the parties.

- The Department Director or Personnel Officer's decision shall be final and binding.

5. Mediation Procedure

In cases of dismissal, after the parties have selected a Hearing Officer and hearing date as provided above, the parties may, by mutual agreement, request non-binding mediation to resolve the dispute prior to arbitration. The selection of the mediator shall be made by mutual agreement. The costs of the mediator services shall be equally divided by the Association and the City.

D. Dismissal

Dismissal of any employee shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

E. Polygraph Examination

In reference to this provision, no disciplinary action shall be taken against an employee refusing to submit to a polygraph examination; nor shall any comment be anywhere recorded indicating that an employee offered to take, took or refused to take a polygraph examination unless otherwise agreed to in writing by the parties; nor shall any testimony or evidence of any kind regarding an employee's offer to take or refusal to take, or the results of a polygraph examination, be admissible in any proceeding pursuant to this Agreement, unless otherwise agreed to in writing by the parties.

Article 13 - Maintenance of Benefits

It is the understanding of the parties that the wages, hours and other terms and conditions of employment contained in this Agreement will not be reduced and shall remain in full force and effect during the entire term of this Agreement; except as expressly provided herein or except by mutual agreement.

Article 14 - Salary

A. Salary Grade Structure: The City of Irvine's Salary Grade Structure, which includes the classifications represented by the Association in this unit, is included as Attachment I.

B. Position Classification to Salary Grades: The classification of individual positions to pay grades is the City's sole responsibility and will be based upon the Human Resources' evaluation of the classification.

C. Classification Requests: During the period designated by Human Resources each year, employees may request a re-evaluation of the position's responsibilities by submitting a new Comprehensive Position Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's Department Director, manager (if applicable) and supervisor will review the request and make a recommendation which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1st.

D. Pay Progression in a Salary Grade

1. Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay

grade. Base pay progression will be provided according to the following schedule:

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Unsatisfactory or Needs Development	0%
Less than Maximum	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or equal to Maximum		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

2. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary period. All subsequent performance reviews will be conducted according to the Annual Performance Appraisal schedule. If the probationary appraisal has been completed

within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

Employees in the following classifications shall have a probationary period of one (1) year of actual and continuous service and shall receive a probationary merit review at six months following their start date of their probationary period.

Public Safety Dispatcher I/II
Public Safety Assistant
Senior Public Safety Assistant
Forensic Specialist I/II
Civilian Investigator I/II
Police Recruit
Supervising Public Safety Dispatcher

3. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Article 15 - Special Assignment Pay

A. Bilingual Pay

Department Directors shall annually designate which positions are assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

1. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

2. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

3. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving bilingual pay.

4. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November.

5. An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

B. "Hazard" Stipend

1. Employees who work in arterial roadways shall be paid additional compensation of $900 per year. This payment shall be made annually, following implementation of each affected employee's annual performance appraisal, but no later than the pay period that includes December 1 of each year. This payment shall be prorated for an employee who is on leave without pay for 30 days or more. Employees are only eligible to receive this payment if they have met the following requirements:

- Are regularly assigned to one of the following City sections in either the Street Maintenance or Landscape Maintenance Divisions in the Public Works Department:
  - Asphalt
  - Traffic Safety
- Are actively employed by the City at the time of payment.
- Received no less than an "accomplished standards" rating on their performance appraisal that year.
- Received no suspension for safety issues during the previous review period, and had no confirmed positive test results through the DOT testing program during the course of the prior calendar year.
- Followed all WATCH manual and CalOSHA standards, if applicable, during the previous review period.
- Held a position in one of the qualifying sections (asphalt, traffic safety) for at least nine (9) out of twelve (12) months that year.
- Employees receiving this Hazard Stipend are not eligible for the Class A/B License Stipend outlined in Section D of this Article.

C. Training Pay

1. If an employee in the classification of Public Safety Dispatcher II is required to train a new employee in the classification of Public Safety Dispatcher I or II, or Public Safety Aide/Assistant acting in the capacity of call-taker in dispatch, that employee shall be paid additional compensation of $75 for each pay period that employee is required to train. Employees are only eligible to receive this pay if they have met the following requirements:
   - Have been POST-certified as Dispatch trainers through the POST Communications Training Officer course.
   - Actual training time must be performed during that pay period.

2. Neither "sit-alongs" nor Communications Training Officer (CTO) meetings qualify the employee for Training Pay.

D. Class A/B License Stipend

Employees whose regular responsibilities require them to participate in the Department of Transportation's (DOT) drug and alcohol testing program, shall be paid additional compensation of $900 per year. This payment shall be made annually, no later than the pay period that includes December 1 of each year. Employees are only eligible to receive this payment if they have met the following requirements:

- Received no suspension for safety issues during the previous review period, and have no confirmed positive test results through the DOT testing program during the course of the prior calendar year.
- Held a position that required DOT testing program participation for at least nine (9) out of twelve (12) months that year.
- Employees receiving this Class A/B License Stipend are not eligible for the Hazard Stipend outlined in Section B of this Article.

This payment is to recognize the impact of random drug and alcohol testing on employees. If the DOT changes its requirements for testing in the future, such that employees would not be subject to random testing, this payment shall cease.

E. Shift Differential

Employees who have been regularly assigned to a standard shift that requires them to work between the hours of 6:00 p.m. and 6:00 a.m. shall be paid additional compensation of $1.50 per hour for each hour that is worked between 6:00 p.m. and 6:00 a.m. This provision applies to regularly scheduled shifts only. This payment does not apply to flex hours, (i.e., if an employee is able to flex his/her hours to work between 6:00 p.m. and 6:00 a.m.) overtime, holiday pay, emergency call-outs or other non-scheduled work during these hours.

F. Compensation For employees Assigned To Care For Animals At Home

Employees who are assigned to care for animals in their home are entitled to compensation for the off-duty hours spent caring, grooming and feeding their animal.

The parties acknowledge that the Fair Labor Standards Act, which governs the entitlement to compensation for off duty caring, grooming and feeding of animals, entitles the parties to agree to a reasonable number of hours per week or per month for the performance of such duties. It is the intent of the parties through the provisions of this agreement to fully comply with the requirements of the Fair Labor Standards Act. In addition, both parties believe that this agreement does comply with the requirements of the Fair Labor Standards Act, including, but not limited to Department of Labor regulation 29 CFR section 785.23.

Employees assigned as animal caregivers at home shall be paid $7.25 per hour for such duties and are not permitted to work more than two (2) hours per week on such duties. The $7.25 is intended to comply with the federal minimum wage per the FLSA. If that wage increases, the compensation for such duties will increase to match the federal minimum wage. Since such hours are in addition to an employee's regular work hours, if such employees exceed the overtime threshold for the week by the performance of the off-duty animal caregiver duties, employees will be paid at 1.5 times the $7.25 per hour rate, i.e., $10.875 (up to a maximum of two hours per week) for such duties for a total weekly amount of $21.75.

1. Only Community Services employees who are regularly assigned to the Irvine Animal Care Center are eligible for this compensation;
2. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for this compensation, depending on the frequency and regularity of these duties.

Article 16 - Overtime and Work Schedule

A. Overtime Compensation

Hours worked or earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one and one-half (1 1/2) times the employee's hourly rate when such work is approved by the Department Director (or his/her designee). Unit members work a seven day FLSA workweek (168 recurring hours). Unit members shall be paid for all hours worked. Unit members shall record

hours worked in fifteen minute increments of time. When an employee works less than eight minutes into the next pay increment, the time should round down to zero. When an employee works more than eight minutes into the next payroll increment, the time rounds up to fifteen minutes. Overtime may be converted to compensatory time or paid for at the option of the employee.

As of the effective date of this Agreement, no hourly classifications qualify as exempt from the overtime provisions of the Fair Labor Standards Act.

B. Compensatory Time

Employees may accumulate a maximum of one hundred twenty (120) hours compensatory time in lieu of overtime compensation on the basis of one and one-half (1 1/2) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

C. Stand-by-Time

Regular full-time employees shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments, including standby for court. If a City holiday falls on a weekend, employees on standby will receive an additional two (2) hours standby pay for each of these holidays.

D. Work Schedules

Employees shall be scheduled to work regular work shifts. In the event overtime is required, compensation for said overtime shall take the form of one of the following, at

the employee's request, subject to the approval of the Department Director (or his/her designee):

1. Paid overtime at 1 1/2 times the employee's hourly rate;
2. Accrued compensatory time to a maximum of 120 hours;
3. An employee will be able to flex his/her time within the same workweek (i.e., take off an equivalent number of hours).

In the event the City institutes a City-wide policy to prohibit or restrict paid overtime, employees shall request, subject to the approval of the Department Director (or his/her designee), one of the following methods of compensation for overtime.

1. Flex time within the same workweek (i.e., take off an equivalent number of hours).
2. Accrued compensatory time to maximum of 120 hours.

An employee may be required to take flex time in lieu of paid overtime or accrued compensatory time off by his/her Department Director (or his/her designee) to attend meetings of City Council, City Commissions, or City committees, provided the employee is given written notification at least 14 calendar days in advance.

E. Distribution of Overtime

1. Every effort shall be made to equalize overtime opportunities for employees fully qualified to perform the work required.

2. If the responsible supervisor determines that overtime is necessary on work that started on an assigned shift, the assigned employee(s) may continue with that work as an extension of the assigned shift.

Article 17 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work

schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Directors to make an informed decision and a summary of how necessary coverage and current service levels will be improved or maintained. Approved alternate work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences that are in excess of one week.

In an emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require that the employee to work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a 14-calendar day notice. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered on a case-by-case basis.

Article 18 - Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, the total cost to the city for medical, dental, psychological, and vision insurance shall not exceed $694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XVIII, item A., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XVIII, item A., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential penalties or taxes under the Affordable Care Act. The City shall

make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and ICEA.

D. Employees not claiming any dependent on any health plan (medical, dental, psych) shall receive $150 per month. The stipend may be taken as taxable cash.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. Insurance Committee

The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with claims history and with proposed changes in rates or coverage.

F. Pension and Pension Administration

1. The provisions of this Section D.1 shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

    a. The City shall invest an amount equal to fifteen percent (15%) of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Effective August 11, 2011, the amount the City invests shall be reduced to 12.448%.

    b. Effective July 1, 2003, the City will deduct an amount equal to four percent (4%) of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all

employees who elected to remain in the City of Irvine DCPP. Effective August 11, 2011, the amount deducted from employee base salary shall be increased to 6.552%.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits past, present or future as provided under section D.2 of this article. Employees who elected to remain in the City of Irvine DCPP, shall continue participation until the employee terminates his/her employment from the City for any reason.

d. Employees shall become 50% vested upon completion of the probationary period, or if the probationary period is greater than six (6) months, employees shall become 55% vested in the retirement plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of five percent (5%) for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five years of service, he/she shall become 100% vested in the retirement plan.

e. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

2. The provisions of section D.2 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

a. The City's contract with CalPERS shall include the following options:
   - 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Section 21354.5)
   - One Year Final Compensation (Cal. Govt. Code Section 20042))
   - Military Service Credit as Public Service (Govt. Code Section 21024), in which the employees pays the entire cost.

- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427).
- 4th Level 1959 Survivor Benefits (Govt. Code Section 21574).
- Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938).

b. All employees hired on or after July 5, 2003, the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through an irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past or future, provided under the City of Irvine DCPP referenced in Article XVII, Section D.1.

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

f. Employer-Paid Member Contributions
   - The full eight percent (8%) cost of the CalPERS member contributions will be paid by the employee.

3. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees hired after implementation of the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

4. All “New Members” within the meaning of the California Public Employees’ Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City’s Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to three percent (3%) of each employee’s base salary in a Voluntary Employees’ Beneficiary Association (VEBA), which shall be established and administered by the Association.

2. Employees participating in the ICEA VEBA shall contribute an amount equal to one percent (1%) of base salary.

3. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City’s rates for the employee and the employee’s dependents at the cost to the former employee, now retiree.

4. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee’s death and provided that there has been no break in coverage since the employee’s retirement. This eligibility for continued coverage ceases if such spouse remarries.

5. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated on 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to Job-Share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129. The Association agrees the City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

Article 19 - Leaves

A. Vacation/Vacation Buyback

1. Employees shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	80 hours	160 hours
After 3 through 7	120 hours	200 hours
After 7 through 10	136 hours	216 hours
After 10 or more	160 hours	240 hours

When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The time during a calendar year at which an employee may take her/his vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if

The employee notifies his or her supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave,

whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave.

The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Wherever practicable, an employee may use compensatory time combined with vacation time when requesting specific vacation periods.

2. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

B. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify her/his immediate superior or the designated department contact prior to or within one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the director of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer or designee.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Worker's Compensation fund to the Finance Officer. An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

C. Personal Sick Leave Conversion

1. Regular employees shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, and October 1) to convert unused Personal Sick Leave in excess of 168 hours at a ratio of eight (8) hours day of vacation for every twenty-four (24) hours of Personal Sick Leave. Except that employees with at least ten years of full-time consecutive service shall be eligible to convert sick leave at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess Personal Sick Leave hours to vacation hours.

2. Regular full-time employees having less than ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of three (3) hours sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 120 hours of sick leave per employee per year. Regular full-time employees with at least ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 80 hours of sick leave per employee per year. Conversion requests can be made only in whole hour increments that are evenly divisible by the conversion ratio. Conversion requests shall be submitted on appropriate forms as determined by the Personnel Officer. The annual election period and payment period shall be designated and announced by Administrative Services annually.

3. Upon separation from the City, a regular full-time employee having less than ten (10) consecutive full-time years of service who has a minimum of 168 hours of Personal Sick Leave may convert the excess Personal Sick Leave to vacation at the ratio of eight (8) hours of vacation for every twenty-four (24) hours of Personal Sick Leave. Employees who separate with at least ten (10) years, but not more than fifteen (15) years of consecutive full-time service, may convert unused sick leave over 168 hours at the rate of eight (8) hours of vacation for every sixteen (16) hours of personal sick leave**.** Employees who separate after fifteen (15) years of full-time, continuous service may convert any accrued and unused sick leave over 84 hours at the rate of eight (8) hours of pay at the normal base pay rate for every sixteen (16) hours of sick leave. Employees who separate with at least ten 10 years of consecutive full-time employment and have at least 200 hours of accrued sick leave at the time of separation, may convert all accrued personal sick leave hours at the ratios described in Section C.2 above. In this situation, the employee may exceed his/her vacation accrual limits. This paragraph shall not apply to employees who separate due to termination for cause or resignation or retirement in lieu of termination for cause.

D. Personal Leave

Effective the pay period which includes January 1st of each year, regular and probationary employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

E. Bereavement Leave

Upon request, employees shall receive necessary time off with pay, not to exceed forty (40) hours in any one (1) instance, to arrange for or attend a funeral or memorial service of a member of their immediate family. Bereavement leave will be granted in instances where the funeral or memorial service is taking place within 30 calendar days after the date of the immediate family member's death. The employee may determine the number of hours, up to 40, that are necessary for each instance of bereavement. For purposes of this Section, immediate family shall mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child**,** grandparent, grandparents in-law grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

F. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence to his/her Department Director of the birth or adoption of the employee's child. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

G. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with

the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

For employees working on shifts in the Police Department, time served on jury duty will be counted as work hours for that date up to the maximum number of hours normally worked by the employee on that date.

If a unit member is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

Employees who are scheduled for a swing or graveyard shift on a day they are called to jury service will be authorized to change their work hours in order to report to jury service.

Employees who are called to jury duty will not be subject to working their full graveyard or swing shift if there is not a minimum of 10 hours before or after assigned jury duty. If there is less than 10 hours between the end of a shift and the start of jury duty, employees will be permitted to leave their shift early to allow for a minimum break of 10 hours. In this situation, employees will be paid for the remainder of their shift. If

there is less than 10 hours between the end of jury duty and the start of their shift, employees will be able to delay their usual start time to ensure a 10 hour break in between. In this event, the employee's usual end time will remain the same. In this situation, employees will be paid from the start time of their shift until they report to work at the appropriate time to ensure a 10 hour break in between the end of jury duty and when they report to work. The 10 hour leave periods are provided by the City and employees are not required to use their accrued time.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

H. Military Leave

An employee shall be entitled to such benefits as are provided in the law An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director prior to the beginning of the leave.

I. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Worker's Compensation payments and his/her regular salary.
2. The employee's condition is not permanent and stationary as determined by the City's appointed doctor.

3. The employee shall accrue sick leave and vacation leave during the term of the Industrial Accident Salary Continuance.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine. Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

J. All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to 80 hours in a pay period.

Article 20 - Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for each of these holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay. If a holiday falls on an employee's regularly scheduled day off, the employee may take off another day within the workweek upon approval of his/her supervisor.

For employees not assigned to a 7-day work schedule holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. The classifications subject to a seven (7) day work schedule (i.e., the nature of their work requires coverage seven days per week:

1) Animal Services Officer;
2) Civilian Investigator I;
3) Civilian Investigator II;
4) Forensic Specialist I;
5) Forensic Specialist II;
6) Public Safety Assistant
7) Public Safety Dispatcher I;
8) Public Safety Dispatcher II;
9) Public Safety Lead Records Specialist;
10) Public Safety Records Specialist;
11) Senior Animal Services Officer;
12) Senior Public Safety Assistant; and
13) Supervising Public Safety Dispatcher

The Police Chief and/or the Human Resources Department have the ability to add or delete classifications from this list.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted compensatory time off, in lieu of pay.

Employees who are assigned to a 7-day work schedule (i.e., where their department is open seven days a week), as designated by their department shall observe holidays on the same days as employees who are not assigned to a 7-day work schedule with the following exceptions:

New Year's Day
Independence Day (4th of July)
Christmas Eve
Christmas Day

In this case, employees shall observe the holiday on the actual day of the holiday. If another City holiday falls on a Friday that City Hall is closed, as a result, the City observes the holiday on a different day, the holiday for employees assigned to a 7-day work schedule shall be observed on the Friday.

Notwithstanding the previous two paragraphs, for employees assigned to 7-day schedules, Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

The City will determine the total number of authorized holidays that would be observed by employees on a 9/80 work schedule for each holiday listed in this Article.
Employees assigned to a 7-day work schedule, as designated by their department, and are scheduled off their regularly scheduled shift of 10 hours or 12 hours, due to a holiday, shall receive holiday pay equivalent to their regularly scheduled shift.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:
Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:
Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave

Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

Article 21 - Educational Reimbursement/Professional Development

Employees covered by this Agreement shall be eligible for reimbursement for approved education or professional development expenses as set forth in City policy up to a maximum of $1,300 per calendar year. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination and/or longevity screenings, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

The City will provide ICEA an accounting of the allocated training funds on a quarterly basis, if requested. This accounting will show departmental funding levels and the use of funds by employee group/category, a list of vendors and amounts paid to those vendors.

Article 22 - Promotions

It shall be the City's policy to recruit the best-qualified persons available regardless of race, religion, color, creed, national origin, sexual preference, sex, or handicap unless sex or physical ability is a bonafide occupational qualification.

While recognizing the need for introduction of persons from outside City employment at all levels, the policy of the City is to promote employees already employed by the City when their personal qualifications, training, work performance, and work experience are determined to be comparable to applicants from other sources.

The Personnel Officer shall determine whether a recruitment shall be open or promotional, on the basis of assuring an adequate number of applicants with appropriate skills to constitute a competitive merit process.
An open selection process shall be held for all position vacancies in each class and class series. However, a promotional selection process may be utilized when the Personnel

Officer, after review with the Department Director, determines such a process is in the best interest of the City. Any unit employee who elects to participate in the recruitment and meets the minimum requirements for the position will be eligible to compete in the examination process. If the examination process includes a written test or graded test the employee will automatically receive an additional five (5) points to their score. Does not apply to practical tests or safety related tests.

When appropriate, vacancies within the unit may be filled by promotion or transfer of probationary or regular employees or other employees at the discretion of the appointing authority. Such promotion transfer shall be based on competitive examination and may include one (1) or more of the selection techniques set forth in the Personnel Rules and Procedures and measure of qualifications as may be determined by the Personnel Officer.

As set forth in the Personnel Rules and Regulations (Article 6, Section 5), an employee rejected during the probationary period from a position to which he/she was promoted shall be reinstated to the position and salary held prior to promotion if a vacancy exists, unless he/she is discharged for a reason which would have been sufficient to cause his/her discharge from his/her former position. If no vacancy exists, the employee shall be placed on a re-employment list for the classification from which he/she was promoted. Employees are not entitled to notice or a hearing if rejected during probation.

Article 23 - Layoff and Recall

Whenever in the judgment of the City Council, it becomes necessary for lack of work or lack of funds, or because the necessity for a position no longer exists, the City Council may abolish any position or employment in this bargaining unit. The employee holding such position may be laid off without the right of appeal. ICEA will be notified in writing of proposed layoffs of ICEA positions. Prior to the abolishment of any ICEA position in the competitive service due to lack of funds or a severe economic downturn, City Management will meet with ICEA representatives to discuss the following issues:

1. Reasons for proposed layoffs.

2. Possible alternatives to layoffs.
3. Alternative solutions to mitigate any effects of potential layoffs.

Although the City will consult with ICEA prior to implementing any layoffs in its bargaining unit, the final determination on the decision to implement any layoffs will be made by the City Council.

When a position within a department or division is abolished as is provided in Section II. G-110 of the City Code, the following general procedure shall be observed:

A. The order of layoff shall be established by the Personnel Officer or his/her designee. He/she shall list all employees in the affected classification(s) using the employees' performance reviews and seniority ratings.

B. An employee's seniority will be modified in the following manner, using the two most recent annual performance evaluation ratings for seniority demerits and the one most recent annual performance evaluation ratings for seniority merits:

Number of Ratings	Level of Rating	Modification to Seniority
1	Unsatisfactory or Needs Development	Subtract 1 year
2	Unsatisfactory or Needs Development	Subtract 3 years
1	Excellent	Add 1 year

The employee's seniority will be modified in the following manner:

Number of Ratings	Level of Rating	Modification to Seniority
1	Does not receive a minimum of Accomplished Standards rating	Subtract 1 year

2	Does not receive a minimum of Accomplished Standards rating	Subtract 3 years
1	Outstanding	Add 1 year

C. The order of layoff will begin with the employee(s) with the least modified total seniority. When the modified total seniority ranking is the same, the Appointing Authority shall take past performance evaluations and the needs of the City into consideration.

D. Prior to the establishment of the order of layoff, the Personnel Officer or his/her designee shall furnish all employees proposed to be included on the layoff list with a copy of the "Proposed Order of Layoff" and a copy of any materials not otherwise available to the employee which were relied upon by the Personnel Officer or his/her designee in establishing the employee's position thereon. If the employee wishes to contest the application of the criteria set forth in this policy to his/her position on the list, the employee may request an opportunity to present his/her case to the Personnel Officer or his/her designee within seven (7) calendar days following the establishment and distribution of the "Proposed Order of Layoff" list and supporting materials. After meeting with all employees wishing to be heard with respect to their position on the layoff list, the Personnel Officer or his/her designee shall establish the "Final Order of Layoff." The decision of the Personnel Officer or his/her designee shall be final and not subject to the grievance process.

E. No employee shall be laid off from his/her position in any department while an emergency, temporary, provisional, regular part-time and part-time, or contract employee is serving in the same classification in the same department. No regular employee shall be laid off in any department while a probationary employee is serving in the same classification in the same department. Employees to be laid off shall be given at least fourteen (14)-calendar days prior notice.

F. An employee who receives a final layoff notice under the provisions of this policy who holds regular full-time status may within seven (7) calendar days of receipt of the layoff notice request demotion to a position within the employee's classification series for which the employee possesses the minimum qualifications and the position remains a budgeted position. In that event, the employee's position on the layoff list shall be reevaluated as though the employee is in the new classification utilizing the same criteria established for the original list.

G. After the bumping process has occurred and if no budgeted position is available within the classification series, the employee may request a transfer or demotion to a position in a similar classification series for which the employee possesses the minimum qualifications and the position remains a vacant budgeted position. For the purposes of this section, a similar classification will mean an ICEA-represented position that is in the same or lower pay grade and requires similar education, skills and/or experience as the position which the employee currently holds, as determined by the Personnel Officer. The employee's request will be considered by the Personnel Officer, who will make every effort to provide for reasonable education and experience equivalencies in determining an employee's minimum qualifications for the available position.

If there is more than one affected employee who is requesting a transfer or demotion into an available position, the City will determine the order of bumping by using the same methodology as described in sections A, B and C of this Article.

H. The names of employees laid off or demoted in lieu of layoff shall be placed upon reemployment lists for one year for those job classes requiring basically the same qualifications, duties, and responsibilities of the class from which layoff or demotion in lieu of layoff was made.

I. Persons whose names are placed on reemployment lists, and who are re-employed within the prescribed period, shall be regarded as having been on "unpaid" leave of absence during this period and will resume accruals of vacation, sick, and other leaves per this Agreement.

Article 24 – Seniority

Seniority shall be defined as the total amount of actual continuous service as a full-time employee, excluding approved leaves of absence without pay in excess of thirty (30) calendar days, including leave of absence for service in the Armed Forces of the United States. Seniority will be a factor when considering promotions and transfers and layoffs. Upon written request the ICEA shall receive whatever written seniority list is available at the time of the request.

An employee who is not a full-time employee shall not lose any previously accrued seniority by virtue of the employee having a status other than that of a full-time employee; however, no seniority shall accrue during any period of time in which an employee is on an approved leave without pay in excess of thirty (30) calendar days, or during any period of time in which an employee has a City employment status other than that of a full-time employee or a job-sharing employee. An employee shall only be entitled to a fifty percent (50%) seniority accrual (i.e., seniority shall be accrued at the rate of one day of seniority for each two days of service) during any period of time in which an employee is classified as a job-sharing employee.

Article 25 - Safety

The City shall provide and maintain a healthy and safe place of employment. No employee shall be required to work under conditions dangerous to the employee's health or safety. The City shall provide and maintain all safety equipment and comply with all health and safety laws and regulations necessary for employees to perform their jobs in a safe manner. Employees shall report unsafe practices, equipment or conditions to their supervisors.

ICEA shall have the right to appoint a voting member to the City Safety Committee. The Committee will develop appropriate rules and regulations to strengthen safety in the workplace.

Any employee has the right to request a Safety Committee review of workplace conditions in written form. The Safety Committee will investigate employee requests for review of worksite

conditions and make recommendations to reduce or eliminate the concern. A report of findings shall be provided to the employee within sixty (60) calendar days from receipt of written concern. The secretary of the Safety Committee shall forward a copy of all regular meetings minutes to the Secretary of ICEA on a regular basis. The Safety Committee shall meet on a monthly basis unless the Committee deems otherwise.

Article 26 - Uniforms, Safety Gear and Inclement Weather Gear

Employees in designated classes shall be provided and required to wear City uniforms. Steel-toed shoes and safety glasses will be provided to employees whose regular duties require their usage. Rain gear will be provided to employees whose regular full-time duties require them to work outside on a continuous basis in adverse elements.

The City will provide an orange, reflective jacket to each full-time employee who regularly works in the public street section and traffic signal repair section. Each employee will be responsible for the reasonable care and cleaning of his or her jacket. Jackets shall be used for official City business only, and shall have the City logo or identification prominently displayed.

Article 27 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least 24 hours in advance, with Human Resources staff.

A copy of any commendations, written warnings or reprimands, disciplinary actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee.

Written reprimands shall be retained at least one year. If after one year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand

be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 28 - Child Care

It is understood that twenty percent (20%) of the enrollment of the Irvine Child Care Center will be made available to children of City of Irvine employees subject to availability of openings within the facility at the cost of the employee.

Article 29 - Probationary Period/Provisional Appointment/Job Sharing

The probationary period shall be six (6) months of actual and continuous service unless otherwise extended for up to 6 months under the Personnel Rules and Procedures, with the exception of the following classifications for which the probationary period shall be one (1) year of actual and continuous service; Public Safety Dispatcher, Public Safety Assistant, Senior Public Safety Assistant, Forensic Specialist I/II, Civilian Investigator I/II, Police Recruit and Supervising Public Safety Dispatcher, shall have a probationary period of one (1) year of actual and continuous service.

In the case of a current full-time employee in an ICEA represented class receiving a provisional appointment (i.e., moving to a position where there is a vacancy – Acting for current employees and Interim for employees hired from outside the City) such provisional appointment shall not be made for a period of less than twenty-eight (28) calendar days. If the position is in another bargaining unit, the employee shall not be entitled to the following changes in compensation and benefits: Annual Physical Examination reimbursement, Retiree Health Voluntary Employees' Beneficiary Association (VEBA) plan, and health plans.

Interested employees in ICEA-represented classes may be considered for job sharing.

Article 30 - Non-Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under the law. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and right to join the ICEA.

Article 31 - Contracting Out

The City will notify ICEA in writing at least fourteen (14) calendar days in advance of entering into any contract which will result in a reduction in regular hours of existing employees in classifications set forth in Attachment I; provided, however, nothing herein shall limit the City's right to contract out beyond that notice. If ICEA feels that an impropriety has occurred regarding contracting out, ICEA may contact Human Resources in writing and the situation will be investigated.

In the event a member of the ICEA bargaining unit is laid-off from his/her employment with the City, without opportunity to voluntarily demote into a lower position or transfer into a comparable position in the City, due to privatization or contracting-out of a city service, the City will provide a severance. The severance shall be equivalent to forty (40) hours of pay, at the current base hourly rate of pay, for every year of full-time City service rounded to the closest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual’s current elected coverage levels and insurance providers, payable through the end of the month in which the severance expires.

A. For example, an individual with seven (7) years and seven (7) months of City service would receive eight (8) weeks, or 320 hours, of pay and three (3) months cash equivalent of health insurance premiums.

Article 32 - Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and effect. Should any change be made in any State or Federal law, or in any rules and regulations implementing such legislation, or in any City Charter provision, which would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The Parties hereto shall meet-and-confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 33 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppage, the ICEA hereby agrees that during the term of this Agreement, neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature against the City whatsoever, or wheresoever located, including but not limited to disputes which are related to the subject matter contained in this Agreement; disputes which are specifically not subjects of this Agreement; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, ICEA and its officers will take steps reasonably within their control to end or avert the same.

Those represented by the ICEA will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of

this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by ICEA found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to Personnel Rules and Regulations.

Article 34 - Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the 11th day of August 2017.

CITY OF IRVINE

By _____

By _____

By _____

By _____

By _____

By _____

IRVINE CITY EMPLOYEES ASSOCIATION

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

ATTACHMENT I
HOURLY CLASSIFICATIONS REPRESENTED BY
I C E A

POSITION TITLE	PAY GRADE
Accounting Technician	6
Administrative Aide	8
Administrative Secretary	7
Animal Care Center Coordinator	10
Animal Services Officer	7
Aquatics Coordinator	10
Armorer	10
Building Inspector	10
Civilian Investigator I	8
Civilian Investigator II	9
Code Enforcement Technician	6
Community Services Program Coordinator	10
Community Services Specialist	6
Computer Technician	8
Construction Inspector	10
Deputy City Clerk I	7
Deputy City Clerk II	9
Disability Services Coordinator	10
Duplicating Technician	6
Engineering Aide	6
Engineering Technician	8
Equipment Mechanic	7
Equipment Operator I	7
Equipment Operator II	8
Exhibition Coordinator	10
Facilities Maintenance Specialist	8
Facilities Maintenance Technician	6
Facilities Reservations Coordinator	10
Food Services Specialist	9
Forensic Specialist I	8

Forensic Specialist II	10
GIS Application Specialist	8
Human Resources Specialist	9
Information Specialist	6
Inspector Trainee	8
Landscape Contract Specialist	8
Landscape Maintenance Specialist	8
Landscape Maintenance Technician	6
Lead Accounting Technician	8
Lead Equipment Mechanic	9
Lead Information Specialist	8
Lead Facilities Maintenance Technician	9
Lead Landscape Maintenance Technician	9
Lead Mail Coordinator	7
Lead Permit Specialist	9
Lead Street Maintenance Technician	9
License Specialist	6
Mail Coordinator	6
Master Facilities Maintenance Specialist	10
Master Landscape Maintenance Specialist	10
Media Services Specialist	7
Multimedia Specialist, IPD	10
Office Specialist	4
Paratransit Driver	4
Permit Specialist I	6
Permit Specialist II	7
Plans Examiner	10
Police Recruit	7
Principal Code Enforcement Inspector	12
Program Assistant	7
Program Specialist	9
Property & Evidence Specialist I	7
Property & Evidence Specialist II	8
Public Information Specialist	6
Public Safety Assistant	6

Public Safety Dispatcher I	7
Public Safety Dispatcher II	8
Public Safety Lead Records Specialist	8
Public Safety Records Specialist	6
Senior Accounting Technician	7
Senior Animal Care Specialist	6
Senior Animal Services Officer	9
Senior Building Inspector	12
Senior Code Enforcement Inspector	10
Senior Construction Inspector	12
Senior Equipment Mechanic	8
Senior Office Specialist	6
Senior Permit Specialist	8
Senior Public Safety Assistant	8
Senior Registered Veterinary Technician	10
Senior Vehicle Installation Technician	10
Street Maintenance Specialist	8
Street Maintenance Technician	6
Supervising Public Safety Dispatcher	10
Traffic Systems Analyst	11
Traffic Systems Specialist	10
Traffic Systems Technician	8
Transit Program Dispatcher	8
Vehicle Installation Technician	6
Video Production Specialist	8

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine Professional Employees Association (IPEA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and IPEA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the IPEA was adopted by the City Council pursuant to Resolution No. 15-77.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and IPEA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 3

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

EXHIBIT A

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EXHIBIT A

MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

Article 1 – Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq.) and City Resolution No. 341, for the purpose of memorializing the Agreement reached between the City and Irvine Professional Employees Association (IPEA) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation, and understanding between the City and its employees.

Article 2 – Recognition

IPEA is hereby acknowledged as the exclusive Recognized Employee Organization representing the employees in the classifications listed in Attachment I (Full-time hourly and exempt non-sworn, non-confidential employees).

Article 3 – Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation, and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the IPEA.

Article 4 – Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement, provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer, and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend, or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

Employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3502. Neither the City nor IPEA shall interfere with, intimidate, restrain, coerce, or discriminate against employees who exercise their rights under this Agreement or the law.

Article 7 - Association Rights

IPEA shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members, and Departmental Representatives. The City shall provide IPEA on a monthly basis, if changes occur, with the following: A list of employees in the classifications set forth in Attachment I; the names of new hires, promotions, and terminations in the classifications set forth in Attachment I; City of Irvine job postings; and copies of current salary schedules. On a quarterly basis, the City will provide IPEA with names and home addresses of all IPEA-represented employees. This information is for the confidential use of IPEA and the City shall not be responsible and will be held harmless by IPEA for inappropriate release of this information by IPEA. Upon written request, the IPEA shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of IPEA to post notices relating to matters of interest to IPEA and to the employees.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

Designated IPEA representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of attending meetings called by Management or to participate in established City committees, such as but not limited to, Citywide Insurance Committee, Defined Contribution Pension Plan Committee and Safety Committee.

A designated IPEA representative shall be entitled to leave his/her work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances. IPEA representatives may have access to IPEA members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work.

In order to allow IPEA an opportunity to handle the business affairs of its members, the City shall, at the beginning of the calendar year, establish a time bank of one-hundred and eighty (180) hours to be used by board members as authorized by the IPEA Board for training, grievances, board meetings, etc. IPEA agrees the effective operation of the City departments is not to be adversely affected by the use of the time bank by IPEA members. No overtime will be paid for an employee to fill in for another using the time bank. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings, and/or attendance at special meetings called by the City shall not be charged against the time bank.

The City shall allocate reasonable office space to IPEA in the Civic Center at no cost to IPEA.

At the orientation of new employees, a City-approved IPEA informational packet will be provided to those who would be eligible to join IPEA. In addition, IPEA and/or its representative will be provided with the opportunity to have 10-minute access to employees in IPEA-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by IPEA under the authority of a membership application signed by each participating employee, which shall be approved by IPEA and remitted promptly to the Payroll Office.

Article 9 - Quarterly City-IPEA Meetings

The City's designated management staff shall meet with the IPEA President, representative and IPEA board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to resolve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary action in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Grievance Procedure

A. Purpose

The purpose of the grievance procedure is to enhance communications between employees and employer by providing a fair and impartial review and consideration of grievances within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Grievance Procedure

A grievance may be filed for alleged violation of any personnel rule or regulation; for the alleged violation of a section of this agreement; or an alleged unfair treatment of an employee; or alleged violation of commonly accepted safety practices or procedures. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations. It shall not be used in matters resulting from disciplinary action or other appeal procedures that exist in accordance with the Personnel Ordinance and Resolution.

Any matter being grieved by an employee will be kept confidential by immediate supervisors and higher-level authorities except in conjunction with the investigation of the grievance.

C. Informal Grievance Adjustment

An employee who believes an alleged violation of matters subject to the grievance process has occurred shall first be required to exhaust the informal grievance level prior to filing a formal grievance. The employee shall have fourteen (14) calendar days from the date the employee had notice of the alleged violation, which he/she believes constitutes a grievance.

The informal grievance level shall consist of the employee verbally informing his/her immediate supervisor of the alleged violation. The immediate supervisor shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days. Any matters, for which he/she does not have authority to make a decision, should be brought to the attention of a higher-level supervisor who does have the proper authority. If the employee is not satisfied with the decision reached through the informal

discussion, he/she may bring the matter to the attention of the next level of authority (i.e., the immediate supervisor's direct supervisor) within fourteen (14) calendar days of the immediate supervisor's response. The next level of authority shall have fourteen (14) calendar days to reply. If the employee is still not satisfied with the decision, within fourteen (14) calendar days after the decision, he/she may bring the matter to the attention of the next level of authority (if more levels below Department Director exist). If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply.

In incidents involving disputes of an agreement with an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal.

D. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing (Form No. 20-33) to their Department Director, with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee). The Department Director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievant is not satisfied with the decision at the Department Director level, the grievant may appeal the decision to the Assistant City Manager or his/her designee, within fourteen (14) calendar days of receipt of the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at a previous level, and a clear, concise

statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the Department Director.

The Assistant City Manager or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Assistant City Manager may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Assistant City Manager, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Assistant City Manager's decision submit a request in writing to the Assistant City Manager for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitration which shall be provided for hereinafter. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service (SMCS) to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The party who strikes first shall be determined by mutual agreement or flipping a coin.

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees for witnesses and conferees, or the costs for witnesses and conferees, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issue and the arbitrator's decision on arbitrability cannot be challenged by the City or overturned.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City Policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days to all parties the written findings and advisory recommendations that he/she has prepared.

The City Manager shall have the authority to accept the recommendation of the advisory arbitrator in whole, or in part, or reject the recommendation entirely and formulate his/her own decision on the grievance. The decision of the City Manager shall be provided to all parties within thirty (30) calendar days.

The City Manager reserves the right to modify any recommendation of a Hearing Officer. The City will bear the entire costs of the Hearing Officer.

The City Manager has the power to render a final decision of a grievance, which shall be binding on all parties. If, upon review, the City Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision.

If the advisory recommendation is acceptable to the City, the City Manager shall take appropriate action to implement the recommendation. If no action is taken by the City, or the grievant does not concur with the Advisory Arbitrator's recommendation, the grievant may appeal, in writing, to the City Manager within fourteen (14) calendar days of the receipt of the Advisory Arbitrator's recommendation.

b. City Manager Review

The Association shall be permitted to concur in a grievant's request to have a hearing before the City Manager to resolve his or her grievance. If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Assistant City Manager's decision, may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

The City Manager shall render a final and binding decision within thirty (30) calendar days following the conclusion of the hearing.

E. General Conditions

1. A formal grievance on interpretations/actions of an agreement, not involving a specific supervisor or Department Director, may be submitted directly to the Personnel Officer or his/her designee. The decision of the City Manager on agreement disputes shall not restrict an employee from other avenues of appeal available under law.

2. The Personnel Officer shall receive and retain copies of all written materials pertaining to the grievance.

3. At any step of the informal grievance adjustment or formal grievance procedure, a Department Director, supervisor, or employee may request a representative of the Personnel Office to participate in any discussion which may take place. Grievances may be initiated by the concerned employee or the Association.

4. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

5. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, it shall be assumed that the grievance has been settled on the basis of the last decision reached.

6. If management fails to respond within any of the time limits specified in the policy, the employee may proceed to the next level as if management responded on the last day possible.

7. Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 11 - Disciplinary Action

A. Disciplinary Authority

The Department Director, after consultation with the Personnel Officer shall have the right, for reasonable cause, to demote, dismiss, reduce in pay or suspend without pay for up to thirty (30) calendar days any regular (i.e., passed probation) member of the unit.

B. Disciplinary Procedure

Upon determination that some form of discipline should be imposed upon an employee, the Department Director or his/her designee shall provide the employee with written notice, which includes the components listed below.

1. The proposed action to be taken.

2. The charges on which the proposed action is based, including all relevant written materials, written reports and documents, which support these charges.

3. The proposed date on which the disciplinary action will take place.

4. The fact that the employee is entitled to respond to the charges either orally or in writing to the Department Director at least seven (7) calendar days after receipt of notification. If the written notice has been issued by the Department Director, the employee may direct his/her response to the Personnel Officer**.** Failure of the employee to make a written or oral response of request will constitute waiver of the right to respond.

5. If the employee elects to respond in person, a meeting shall be conducted at which the employee shall be given the opportunity to respond to the charges. The meeting shall be held by the Department Director or the Personnel Officer in those instances where the written notice has been issued by the Department Director. The employee shall be entitled to be represented by counsel or other person of his/her choosing during the course of the above proceeding.

6. After following the above procedure, the Department Director or the Personnel Officer shall prepare the written notice of decision to be served personally upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The City shall have the right to place any employee on paid administrative leave pending investigation and processing of any potential disciplinary action. The provisions of this Article shall not apply to reductions in pay, which are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal

When formal disciplinary action of dismissal, demotion**,** reduction in pay, reduction of accrued leaves equivalent to 3 or more days or suspension without pay for three (3) or more days has been taken pursuant to this Article, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or accrued leaves or suspended without pay for three (3) or more days, may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

3. Hearing Procedure

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary actions imposed pursuant to this Article. In case of termination, however, the Association may request a Hearing Officer be selected from a list provided by the State Mediation and Conciliation Service (SMCS). The parties shall request the SMCS to supply a panel of seven (7) names of persons experienced in hearing disciplinary cases for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Hearing Officer. The order of striking shall be determined by mutual agreement or flipping a coin. The Hearing Officer will not be an employee of the City of Irvine. If the Association requests a Hearing Officer from the SMCS, the costs of the Hearing Officer's services shall be equally divided by the Association and the City.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight, and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The City shall first present its witnesses and evidence to sustain the

charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the City and the employee or their respective designees may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager no later than thirty (30) calendar days after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charges, if any, the Hearing Officer finds are sustained or not sustained and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

4. <u>Appeal Procedure for Suspensions of Less Than Three (3) Days and Reductions of Accrued Leaves Equivalent to less than (3) Days</u>

a. A member of the unit who has been suspended without pay, for less than three (3) days, may appeal to the Department Director, or in the

event the discipline has been issued by the Department Director, the Personnel Officer, within seven (7) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing.

b. Hearing Procedure:

- At least seven (7) calendar days prior to the hearing, both parties shall provide a list of witnesses and or exhibits to the Department Director or Personnel Officer.

- During the hearing, the Department Director or Personnel Officer shall hear and consider the evidence, witnesses, and/or exhibits from both parties.

- The Department Director or Personnel Officer may grant a continuance for any reason he/she believes to be important to reaching a fair decision.

- The Department Director or Personnel Officer shall consider all evidence and shall base his/her findings on the preponderance of evidence. He/she shall render his/her decision as soon as possible after the conclusion of the hearing, but in no event later than fourteen (14) calendar days after conducting the hearing, unless agreed to by the parties.

- The Director or Personnel Officer's decision shall be final and binding.

5. Mediation Procedure

In cases of dismissal, after the parties have selected a Hearing Officer and a hearing date as provided above, the parties may, by mutual agreement, request non-binding mediation to resolve the dispute prior to arbitration. The selection of the mediator shall be made by mutual agreement. The costs of the mediator services shall be equally divided by the Association and the City.

D. Dismissal

Dismissal of any employee shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions, which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline, except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

E. Polygraph Examination

In reference to this provision, no disciplinary action shall be taken against an employee refusing to submit to a polygraph examination; nor shall any comment be anywhere recorded indicating that an employee offered to take, took or refused to take polygraph examination unless otherwise agreed to in writing by the parties; nor shall any testimony or evidence of any kind regarding an employee's offer to take or refusal to take, or the results of a polygraph examination, be admissible in any proceeding pursuant to this Agreement, unless otherwise agreed to in writing by the parties.

Article 12 - Maintenance of Benefits

It is the understanding of the parties that the wages, hours, and other terms and conditions of employment contained in this Agreement will not be reduced and shall remain in full force and effect during the entire term of this Agreement; except as expressly provided herein or except by mutual agreement.

Article 13 – Salary

A. Salary Grade Structure: The City of Irvine's Salary Grade Structure, which includes the classifications represented by the Association in this unit, is included as Attachment I.

B. Position Classification to Salary Grades: The classification of individual positions to pay grades is the City's sole responsibility and will be based upon Human Resources' evaluation of the classification.

C. Classification Requests: During the period designated by Human Resources each year, an employee may request a re-evaluation of the position's responsibilities by submitting a new Comprehensive Position Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's department director, manager (if applicable), and supervisor will review the request and make a recommendation which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1 of the following fiscal year.

D. Pay Progression in a Salary Grade

Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay progression will be provided according to the following schedule:

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Unsatisfactory or Needs Development	0%
Less than Maximum	Accomplished Standards, Excellent or Outstanding	5% base adjustment, limited to maximum of pay grade
Greater than or equal to Maximum		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

E. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

F. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary merit review. All subsequent performance reviews will be conducted according to the Annual Performance Appraisal schedule. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

Article 14 -Bilingual Pay

Department Directors shall annually designate which positions should be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

Article 15 - Overtime and Work Schedules

A. Overtime Compensation for Employees on Schedule A:

Hours earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one- and one-half (1 1/2) times the employee's hourly rate when such work is approved by the Department Director (or his/her designee). Unit members work a seven day FLSA work week (168 recurring hours). As of the effective date of this Agreement, no classifications on Schedule A qualify as exempt from the overtime provisions of the Fair Labor Standards Act. Unit members shall be paid for all hours worked. Unit members shall record hours worked in fifteen minute increments of time. When an employee works less than eight minutes into the next pay increment,

the time should round down to zero. When an employee works more than eight minutes into the next payroll increment, the time rounds up to fifteen minutes.

Overtime may be converted to compensatory time or paid for at the option of the employee.

B. Compensatory Time for Employees on Schedule A:

Employees may accumulate a maximum of eighty (80) hours compensatory time in lieu of overtime compensation on the basis of one- and one-half (1 1/2) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

C. Stand-by Time for Employees on Schedule A:

Regular full-time employees shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments.

D. Work Schedules:

Unit members work a seven day FLSA work week (168 recurring hours).

Work schedule is defined as an employee's regularly assigned hours of the day and days per week and may include:

1. The 9/80 schedule (four nine hour days per work week and one alternating eight hour day/regular day off). Employees working the 9/80 have an FLSA work week designated as beginning four hours into their alternating regular day off (eight hour day).

2. The 5/40 schedule (five eight hour days per work week). Employees working the 5/40 have a FLSA work week designated as beginning at 12:00 a.m. on Saturday through 11:59 p.m. Friday.

3. The 4/10 schedule (four ten hour days per work week). Employees working the 4/10 have a FLSA work week designated as beginning at 12:00 a.m. on Saturday through 11:59 p.m. Friday.

Employees in classifications listed on Schedule A shall be scheduled to work regular work shifts. In the event overtime is required, compensation for said overtime shall take the form of one of the following, at the employee's request, subject to the approval of the Department Director (or his/her designee).

1. Paid overtime at one- and one-half (1 1/2) times the employee's hourly base rate;
2. Accrued compensatory time to a maximum of eighty (80) hours;
3. An employee will be able to flex his/her time within the same workweek (i.e., take off an equivalent number of hours).

In the event the City institutes a citywide policy to prohibit or restrict paid overtime, employees in classifications listed on Schedule A shall request, subject to the approval of the Department Director (or his/her designee), one of the following methods of compensation for overtime.

1. Flex time within the same workweek (i.e., take off an equivalent number of hours);
2. Accrued compensatory time to a maximum of one hundred and twenty (120) hours.

An employee in a classification listed on Schedule A may be required to take flex time in lieu of paid overtime or accrued compensatory time off by his/her Department Director (or his/her designee) to attend meetings of City Council, City Commissions, or City committees, provided that the employee is given written notification at least fourteen (14) calendar days in advance.

Article 16 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Director to make an informed decision and a summary of how necessary coverage and current service levels will, at a minimum, be maintained. Approved alternate work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences which are in excess of one (1) week.

In an unforeseen emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require the employee to work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a fourteen (14) calendar day notice. When a Department Director perceives a problem exists because of the alternate work schedule, he/she will notify the involved employee(s) and give them seven (7) calendar days to respond to the issue prior to instituting a new schedule. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered, on a case-by-case basis.

Article 17 – Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions:

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological, and vision insurance shall not exceed $ 694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article 17, item A., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article 17, item A., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential penalties or taxes under the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and IPEA.

D. Employees not claiming any dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be used for deferred compensation, taxable cash, or to purchase voluntary additional life insurance, or enhanced dental plans.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with such information as claims history, and with proposed changes in rates or coverage.

F. Pension and Pension Administration

1. The provisions of this Section D.1 shall apply to employees as of June 30, 2003, who elected to decline the CalPERS benefits.

    a. The City shall invest an amount equal to fifteen percent (15%) of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Effective August 11, 2011, the amount the City invests shall be reduced to 12.448%.

b. Effective July 1, 2003, the City will deduct an amount equal to four percent (4%) of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elected to remain in the City of Irvine DCPP. Effective August 11, 2011, the amount deducted from employee base salary shall be increased to 6.552%.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits past, present or future, as provided under section D.2 of this article. Employees who elected to remain in the City of Irvine DCPP shall continue participation until the employee terminates his/her employment from the City for any reason.

d. Employees shall become 50% vested upon completion of the probationary period, or if the probationary period is greater than 6 months, employees shall become 55% vested in the retirement plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five years of service, he/she shall become 100% vested in the retirement plan.

e. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

2. The provisions of this section D.2 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

a. The City's contract with CalPERS shall include the following options:
   - 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   - One Year Final Compensation (Cal. Govt. Code Section 20042)
   - Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
- 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
- Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

b. All employees hired on or after the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Article 17, Section D.1.

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

f. The full percent (8%) cost of the CalPERS member contributions will be paid by the employee.

3. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees hired after implementation of the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

4. All "New Members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the

normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account.

2. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

3. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

4. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated at 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to job share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129. The Association agrees the City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

Article 18 – Leaves

A. Vacation Accrual/Usage

Employees shall accrue vacation credits as follows:

Years of Service	Employees on Schedule A	Employees on Schedule B
1 through 3	80 hours	120 hours
After 3 through 7	120 hours	160 hours
After 7 through 10	136 hours	160 hours
After 10 or more	160 hours	200 hours

Employees may not accrue more than eighty (80) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. Example: an employee with two (2) years of service earns eighty (80) hours of vacation. However, in this example the employee may accrue up to one hundred and sixty (160) hours of vacation at any one time.

The time during a calendar year at which an employee may take his/her vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City. Should special circumstances preclude the employee from using enough vacation to remain below the maximum limits stated above, the employee shall be paid for vacation earned in excess of the cap on

accrual. Payment shall be made during the pay period in which the vacation is earned and at the employee's base rate of pay.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if:

The employee notifies his or her supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave, whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave.

The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Whenever practicable, an employee may use compensatory time combined with vacation time when requesting specific vacation periods.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or the designated department contact prior to or within one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the director of his/her department. When absence is for one (1) work day or more, the employee may be required to file a physician's certificate with the Personnel Officer.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

D. Personal Sick Leave Conversion

1. Regular employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of one-hundred and sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. One hundred and sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave credits to vacation credits. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of one-hundred and sixty-eight (168) hours at the ratio of eight (8) vacation hours for every sixteen (16) sick leave hours.

2. Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Association's Retiree Health Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the RHS shall occur as follows:

- The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

3. Upon separation from the City, regular full-time employees must convert hours into their respective individual accounts in the Association's Retiree Health Savings Plan, as follows:

- The City will convert unused personal sick leave in excess of 168 hours into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave in excess of 168 hours into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years, but not more than 15 years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave in excess of 84 hours into the Retiree Health Savings Plan for regular full-time employees with at least fifteen (15) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- For any regular full-time employee who separates with at least ten (10) years consecutive full-time employment and has at least 250 hours of accrued sick leave at the time of separation, the City will convert all unused personal sick leave hours at the ratios described in Section D.3 above into their

respective individual accounts in the Association's Retiree Health Savings Plan.

This section shall not apply to employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause.

E. Personal Leave

Effective the pay period which includes January 1st of each year, regular and probationary employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Upon request, employees shall receive necessary time off with pay, not to exceed forty (40) hours in any one (1) instance, to arrange for or attend a funeral of a member of their immediate family. For purposes of this Section, immediate family shall mean father, father-in-law, mother, mother-in-law, step-parent, brother, sister, step-brother, step-sister, wife, husband, registered domestic partner, child, step-child, grandparent, grandparents in-law, grandchild, legal guardian or other individual whose relationship to the employee is that of a dependent a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed one-hundred and eighty (180) calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence to his/her Department Director of the birth or adoption of the employee's child. The City will comply with all elements of parenthood leave under the Family Medical Leave Act (FMLA) and the California Family Rights Act (CFRA). Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Jury Duty

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours, he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If a unit member is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

I. Military Leave

An employee shall be entitled to such benefits as are provided in the law. An employee requesting such military leave shall present a copy of his/her military orders to his/her Department Director prior to the beginning of the leave.

J. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

2. The employee shall accrue sick leave or vacation leave during the term of the Industrial Accident Salary Continuance;

3. The employee's condition is not permanent and stationary as determined by the City appointed doctor.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine. Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

K. Administrative Leave

Effective the first pay period beginning in January of each year, employees in Schedule B of Attachment I will receive twenty (20) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis during the calendar year for new employees entering Schedule B of Attachment I during the calendar year. Administrative Leave must be used by the end of the calendar year. Such hours shall not be accrued from year-to-year or paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 20 hours.

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

Article 19 – Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay. If a holiday falls on an employee's regularly scheduled day off, the employee may take off another day during the workweek with approval of his/her supervisor.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted compensatory time off, in lieu of pay, within the pay period in which the holiday falls. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

Article 20 - Educational Reimbursement/Professional Development

Employees covered by this Agreement shall be eligible for reimbursement for approved education or professional development expenses as set forth in City policy up to a maximum of $1,300 per calendar year.

For employees in classifications listed on Schedule B, a maximum of $500 of the employee's annual professional development funds may be for the following expenses:

1. Up to $250 towards supplementing un-reimbursed expenses for their annual physical examination, subject to the provisions of Article 21 of this MOU and Article 24 of the City's Personnel Rules and Procedures. The employee may apply any unused amount of this $250 towards travel, hotel and meal expenses for City-approved conferences, seminars and/or job-related training to supplement subsection 2 of this Article.
2. Up to $250 towards travel, hotel and meal expenses for City-approved conferences, seminars, and /or job-related training.

Article 21- Annual Physical Examination

The City shall reimburse up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 22- City Manager Award for Employee Achievement

Management may recommend an employee achievement program, which will provide financial awards to regular full-time, and regular part-time City employees, including members of the IPEA. The program is more fully explained in a policy/procedure titled City Manager's Award for Employee Achievement. An amount for funding levels and awards will be considered on an annual basis by the City Council.

Article 23- Promotions

It shall be the City's policy to recruit the best qualified persons available regardless of race, religion, color, creed, national origin, sexual preference, sex, or disability unless sex or physical ability is a bonafide occupational qualification.

While recognizing the need for introduction of persons from outside City employment at all levels, the policy of the City is to promote employees already employed by the City when their personal qualifications, training, work performance, and work experience are determined to be comparable to applicants from other outside sources.

The Personnel Officer shall determine whether a recruitment shall be open or promotional, on the basis of assuring an adequate number of applicants with appropriate skills to constitute a competitive merit process.

An open selection process shall be held for all position vacancies in each class and class series. However, a promotional selection process may be utilized when the Personnel Officer, after review with the Department Director, determines such a process is in the best interest of the City.

When appropriate, vacancies within this bargaining unit may be filled by promotion or transfer of probationary or regular employees or other employees at the discretion of the appointing authority. Such promotion/transfer shall be based on competitive examination and may include one (1) or more of the selection techniques set forth in the Personnel Rules and Procedures and measures of qualifications as may be determined by the Personnel Officer.

Article 24 – Classifications

Positions classified at the assistant and associate levels will be indicated as "flexibly staffed" positions as provided in the City's Personnel Rules and Procedures.

Article 25 - Layoff and Recall

Whenever in the judgment of the City Council, it becomes necessary for lack of work or lack of funds, or because the necessity for a position no longer exists, the City Council may abolish any position or employment in this bargaining unit. The employee holding such position may be laid off without the right of appeal. The IPEA will receive a copy of the "Proposed Order of Layoffs" of IPEA positions.

When a position with a department or division is abolished as is provided in Section II. G-110 of the City Code, the following general procedure shall be observed:

A. The order of layoff shall be established by the Personnel Officer or his/her designee. He/she shall list all employees in the affected classification(s) using the employee's modified seniority.

An employee's seniority is modified for purposes of establishing the order of layoff using the two most recent performance evaluation ratings for seniority demerits and the one most recent annual performance evaluation ratings for seniority merits:

Number of Ratings	Level of Rating	Modification to Seniority
1	Does not receive a minimum of Accomplished Standards rating	Subtract 1 year
2	Does not receive a minimum of Accomplished Standards rating	Subtract 3 years
1	Outstanding	Add 1 year

B. The order of layoff will begin with the employee(s) with the least modified total seniority. When the modified total seniority ranking is the same, the Appointing Authority shall take past performance evaluations and the needs of the City into consideration.

C. Prior to the establishment of the order of layoff, the Personnel Officer or his/her designee shall furnish all employees proposed to be included on the layoff list with a copy of the "Proposed Order of Layoff" and a copy of any materials not otherwise available to the employee which were relied upon by the Personnel Officer or his/her designee in establishing the employee's position thereon. If the employee wishes to contest the application of the criteria set forth in this policy to his/her position on the list, the employee may request an opportunity to present his/her case to the Personnel Officer or his/her designee within seven (7) calendar working days following the establishment and distribution of the "Proposed Order of Layoff" list and supporting materials. After meeting with all employees wishing to be heard with respect to their position on the layoff list, the Personnel Officer or his/her designee shall establish the "Final Order of Layoff list." The decision of the Personnel Officer or his/her designee shall be final and not subject to the grievance process.

D. No employee shall be laid off from his/her position in any department while an emergency, temporary, provisional, regular part-time or part-time, or contract employee is serving in the same classification in the same department. Employees to be laid off shall be given at least fourteen (14) calendar days' notice.

E. An employee who receives a final layoff notice under the provisions of this policy who holds regular full-time status may, within seven (7) calendar days of receipt of the layoff notice, request demotion to a position within the employee's classification series for which the employee possesses the minimum qualifications providing the position remains a budgeted position. In that event, the employee's position on the layoff list shall be reevaluated as though the employee is in the new classification utilizing the same criteria established for the original list.

F. The names of employees laid off or demoted in lieu of layoff shall be placed upon reemployment lists for eighteen (18) months for those job classes requiring basically the same qualifications, duties, and responsibilities of the class from which layoff or demotion

in lieu of layoff was made. At the time the employee is laid off or demoted in lieu of layoff, the employee shall receive a list of job classes requiring basically the same qualifications, duties, and responsibilities of the classes from which layoff or demotion in lieu of layoff was made.

G. Persons whose names are placed on reemployment lists , and who are re-employed within the prescribed period, shall be regarded as having been on "unpaid" leave of absence during this period and will resume accruals of vacation, sick and other leaves in accordance with this Agreement.

H. In the event a member of the IPEA bargaining unit is laid-off from his/her employment with the City, without the opportunity to voluntarily demote into a lower position or transfer into a comparable position in the City, due to the contracting-out of a City service, the City will provide a severance. The severance shall be equivalent to forty (40) hours of pay, at the current base hourly rate of pay, for every year of full-time City service rounded to the closest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual's current elected coverage levels and insurance providers, payable through the end of the month in which the severance expires.

For example, an individual with seven (7) years and seven (7) months of City service would receive eight (8) weeks, or 320 hours, of pay and three (3) months cash equivalent of health insurance premiums.

Article 26 – Seniority

Seniority shall be defined as the total amount of actual continuous service as a full-time employee, excluding approved leaves of absence without pay in excess of thirty (30) calendar days, including leave of absence for service in the Armed Forces of the United States. Seniority will be a factor when considering promotions, transfers, and layoffs.

An employee who is not a full-time employee shall not lose any previously accrued seniority by virtue of the employee having a status other than that of a full-time employee; however, no seniority shall accrue during any period of time in which an employee is on an approved leave without pay in excess of thirty (30) days, or during any period of time in which an employee has a City employment status other than that of a full-time employee or a job-sharing employee.

An employee shall only be entitled to a fifty percent (50%) seniority accrual (i.e., seniority shall be accrued at the rate of one day of seniority for each two days of service) during any period of time in which an employee is classified as a job-sharing employee.

Article 27 – Safety

The City shall provide and maintain a healthy and safe place of employment. No employee shall be required to work under conditions dangerous to the employee's health and safety. The City shall provide and maintain all safety equipment and comply with all health and safety laws and regulations necessary for employees to perform their jobs in a safe manner. Employees shall report unsafe practices, equipment or conditions to their supervisors.

IPEA shall have the right to appoint a voting member to the City Safety Committee.
Any employee has the right to request a Safety Committee review of workplace conditions in written form. The Safety Committee will investigate employee requests for review of worksite conditions and make recommendations to reduce or eliminate the concern. A report of findings shall be provided to the employee within sixty (60) calendar days from receipt of written concern. The secretary of the Safety Committee shall forward a copy of all regular meeting minutes to the Secretary of IPEA on a regular basis. The Safety Committee shall meet on a monthly basis unless the Safety Committee deems otherwise.

Article 28 - Safety Gear and Inclement Weather Gear

Steel-toed shoes and safety glasses will be provided to employees whose regular duties require their usage. Rain gear will be provided to employees whose regular full-time duties require them to work outside on a continuous basis in adverse weather elements.

Article 29 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least twenty-four (24) hours in advance, with Human Resources staff. A copy of any commendations, written warnings or reprimands, disciplinary

actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee. The employee shall have an opportunity to respond in writing to documents placed in the file. This response will be filed with the original document.

Written reprimands shall be retained at least one (1) year. If after one (1) year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 30 - Child Care

It is understood that twenty percent (20%) of the enrollment of the Irvine Child Care Center will be made available to children of City of Irvine employees subject to availability of openings within the facility at the cost of the employee.

Article 31- Provisional Appointment/Probationary Period

In the case of a current full-time employee in an IPEA-represented class receiving a provisional appointment, (i.e., moving to a position where there is a vacancy – Acting for current employees and Interim for employees hired from outside the City) such provisional appointment shall not be made for a period of less than twenty-eight (28) calendar days. If the provisional appointment is to a position in another bargaining unit or to a classification listed on Schedule B, the employee shall not be entitled to the following changes in compensation and benefits: Annual Physical Examination reimbursement, Retiree Health Voluntary Employees' Beneficiary Association (VEBA) plan, and health plans, including psychological.

The probationary period is six (6) months of actual and continuous service unless otherwise extended under the Personnel Rules and Procedures**.**

Article 32 - Non Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under the law. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and the right to join IPEA.

Article 33 - Contracting Out

The City will notify IPEA in writing at least fourteen (14) calendar days in advance of entering into any contract which will result in a reduction in regular hours of existing employees in classifications set forth in Attachment I; provided, however, nothing herein shall limit the City's right to contract out beyond that notice. If IPEA feels that an impropriety has occurred regarding contracting out, IPEA may contact Human Resources in writing and the situation will be investigated.

Article 34 – Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and effect. Should any change be made in any State or Federal law, or in any rules and regulations implementing such legislation, or in any City Charter provision that would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The Parties hereto shall meet and confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 35 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppage, the IPEA hereby agrees that during the term of this Agreement, neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature

against the City whatsoever, or wheresoever located, including, but not limited to, disputes which are related to the subject matter contained in this Agreement; disputes which are specifically not subjects of this Agreement; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, IPEA and its officers will take steps reasonably within their control to end or avert the same.

Those represented by the IPEA will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by IPEA found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to Personnel Rules and Regulations.

Article 36 – Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the 11th day of August, 2017.

CITY OF IRVINE	IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION
By:	By:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Attachment I
CLASSIFICATIONS REPRESENTED BY
IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

SCHEDULE A (Non-Exempt Employees)

Classification	Pay Grade
Assistant Engineer	10
Assistant Planner	9
Assistant Transportation Analyst	9
Associate Planner	11
Associate Transportation Analyst	12
GIS Analyst	10
Grants Coordinator	11

SCHEDULE B (Exempt Employees)

Classification	Pay Grade
Accountant	10
Assessment District Engineer	17
Associate Engineer	13
Associate Plan Check Engineer	13
Engineering Geologist	14
Right-of-Way Administrator	15
Senior Accountant	12
Senior Civil Engineer	16
Senior GIS Analyst	12
Senior Plan Check Engineer	16
Senior Planner	13
Senior Project Manager	14
Senior Transportation Analyst	14
Senior Transportation Engineer	16
Water Quality Administrator	15

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine Police Management Association (IPMA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and IPMA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017, through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the IPMA was adopted by the City Council pursuant to Resolution No. 16-46.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and IPMA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 4

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE



MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE POLICE MANAGEMENT ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 – JUNE 30, 2019

EXHIBIT A

IRVINE POLICE MANAGEMENT ASSOCIATION

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MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE POLICE MANAGEMENT ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE, 2019

PREAMBLE

This Memorandum of Understanding, hereinafter referred to as the "Agreement" or "MOU," entered into by the CITY OF IRVINE, herein referred to as "City," and the IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), hereinafter referred to as the "Association," has as its purpose the promotion of harmonious labor relations between the City and the Association, establishment of an equitable and peaceful procedure for the resolution of differences and the establishment of rates of pay, hours of work, and other conditions of employment.

Article 1 - Recognition

The Association is the exclusive representative of the classifications of Police Commander and Police Lieutenant.

Article 2 - City Rights

Except as expressly limited by this MOU or other applicable laws, the City retains the exclusive right (a) to direct employees of the Police Department; (b) to hire, promote, transfer, and assign employees to positions within the Department consistent with applicable classifications; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend or discharge employees; (e) to determine the mission of the Department, its budget, its organization, the number of employees and the methods and technology of performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all

rights not clearly and expressly limited by this MOU are expressly reserved to the City, even though not enumerated.

Article 3 - Employee Rights

Safety employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3300 et seq., and Irvine Police Department Procedure relating to "Public Safety Officers Procedural Bill of Rights." Employees shall have the right to have documented disciplinary actions or other adverse documented incidents removed from their personnel files pursuant to Police Department Procedure 2.02.17. No employee shall be interfered with, intimidated, restrained, coerced, or discriminated by the City because of his/her exercise of these rights.

Article 4 - Association Rights

A. Payroll Deductions - The City agrees to continue payroll deductions to Association on behalf of its members for dues, and/or any insurance plan sponsored by the Association, unless authorization to make such deductions is canceled in writing by the individual employees.

B. Release Time for Association Business - In order to allow the Association an opportunity to handle the business affairs of its members, including handling of grievances, the City shall, at the beginning of each contract year, establish the annual time bank specified below for Association use, to be used as authorized by the Association President, as the chief executive officer of the Association, and, in his absence, the Secretary. The Association agrees, however, that the effective operations of the Police Department are not to be adversely affected by the use of the time bank by the Association members. If the Association members' absence does not impact staffing or other vital departmental operations as determined by the Chief of Police, the employee shall be released without restrictions. It is also understood that time for the annual meet and confer preparation and meetings and/or any special meetings called by the City shall not be charged against the time bank. It is also understood that hours from the time bank will not be carried over from year to year. The time bank will be a maximum of 200 hours per year for all Association business related to the Police Management unit.

Article 5 - Grievance Procedure

A. Matters Subject to the Grievance Procedure

A grievance may be filed for the alleged violation of any Personnel Rule and Regulation dealing with required subjects of bargaining that are not specifically reserved to the City in the City Rights clause, Article II; for an alleged violation of an express provision in the MOU; or alleged violation of established and commonly accepted safety practices or procedures. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations. It shall not be used in connection with disciplinary actions or other matters for which appeals procedures exist under the Personnel Ordinance, Personnel Rules and Regulations, or pursuant to statute.

B. Informal Grievance Adjustment

An employee who has a complaint should try to solve the problem through informal discussion with his/her immediate supervisor without delay, and in no event later than fourteen (14) calendar days after the event giving rise to the complaint. The immediate supervisor shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days**.** If the employee is not satisfied with the decision reached through the informal discussion, and/or some other extenuating circumstances exist, he/she may bring the matter to the attention of the next level of authority within fourteen (14) calendar days of such decision. If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply**.**

In incidents involving an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal**.**

C. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed on matters subject to this procedure only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing to the Police Chief with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee, setting forth the section(s) of the MOU or Personnel Rules and Regulations allegedly violated and reciting all the facts and circumstances constituting the claimed violation. The department director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievant is not satisfied with the decision at the department director level, the grievant may appeal the decision to the Personnel Officer or his/her designee, within fourteen (14) calendar days of receipt of the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at the previous level, and a clear, concise statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the department director.

The Personnel Officer or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Personnel Officer may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Personnel Officer and the grievance alleges violation of the MOU, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Personnel Officer's decision submit a request in writing to the Personnel Officer for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitrability. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The party who strikes first shall be determined by mutual agreement or by flipping a coin.

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees and costs for witnesses and representatives, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues alleged in the grievance that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other

evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issues.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days, to all parties, the written findings and advisory recommendations that he/she has prepared.

The City Manager has the power to render a final decision of a grievance which shall be binding on ALL parties. If, upon review, the City Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision. Said decision of the City Manager shall be provided to all parties within thirty (30) calendar days of his/her receipt of the Advisory Arbitrator's findings and recommendations.

b. City Manager Review

If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Personnel Officer's decision may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

In instances where the City Manager hears a grievance he/she shall conduct such hearings which will be closed to the public but open to all parties in interest as he/she may deem necessary and shall render a

final and binding decision within thirty (30) calendar days following the conclusion of the hearing.

D. General Conditions

1. The Personnel Officer shall receive and retain copies of all written materials pertaining to the grievance.

2. At any step of the informal grievance adjustment or formal grievance procedure, a department director, supervisor, or employee may request a representative of Human Resources to participate in any discussions which may take place. Grievances may be initiated by the concerned employee or the Association.

3. A formal grievance, not involving a specific supervisor or department director, may be submitted directly to the Personnel Officer.

4. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

5. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, the grievance shall be deemed settled on the basis of the last decision reached.

6. If management fails to respond within any of the time limit specified in this policy, the employee may proceed to the next level as if management responded on the last day possible.

7. An extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 6 - Disciplinary Action

A. Disciplinary Authority

The department director shall have the right, for reasonable cause, to demote, dismiss, reduce in pay or suspend without pay for up to thirty (30) calendar days any regular member of the unit. An appeal process for "punitive action" other than a demotion, dismissal, reduction in pay or suspension is included as Attachment VIII to this MOU.

B. Discipline Procedure

The department director or designee proposing that action be taken shall provide the employee with written notice of the proposed action. The written notice shall contain the date it is intended to be effective, the charge(s) and facts on which the proposed action is based and notification that the employee is entitled to respond to the charges orally or in writing to the department director or designee within seven (7) calendar days of receipt of notification. Failure of the employee to make a written or oral response or request will constitute waiver of the right to respond. Further, the employee shall be provided with the relevant written materials, written reports and documents considered by the department director or designee in reaching his/her decision to propose the action.

If, the employee elects to respond in person, a meeting shall be scheduled with the department director or designee to whom the employee shall be given the opportunity to respond to the proposed action. Subject to the provisions of Government Code section 3303(i), the employee shall be entitled to be represented by counsel or other person of his/her choosing at the meeting.

If after following the above procedure discipline is implemented, a written notice of discipline shall be served upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The director will hear employee responses to all contemplated disciplinary actions, which propose a penalty equal to or more severe than a forty-hour suspension without pay.

The City shall have the right to put any employee on immediate paid administrative leave pending investigation and processing of any potential disciplinary action.

The provisions of this Article shall not apply to reductions in pay, which are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal:

When formal disciplinary action has been taken by the department director or designee and the employee has received written notification of the action, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure:

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or significantly suspended without pay, may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

It is expressly understood that separation due to involuntary retirement for disability shall not be considered discipline for the purpose of this Article. Procedures for contesting separation due to involuntary retirement shall be as set forth in the City's Defined Benefit Retirement Plan for employees covered by that plan.

3. Hearing Procedure:

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary actions imposed pursuant to this Article.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The department director shall first present his/her witnesses and evidence to sustain the charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the department director and the employee or their respective designees may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other relevant records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charges the Hearing Officer sustains or does not sustain and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

D. Dismissal:

Dismissal of any employee from the competitive service shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

Article 7 - Wages

Salary Adjustments

The salary ranges of classifications covered by this Agreement shall be as set forth in the Schematic Arrangement of Class Titles and Salary Ranges as shown on Attachment I.

Effective the pay period that includes September 1, 2017, the base salary of employees in this bargaining unit shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the base salary of employees in this bargaining unit shall be increased by percent (2.0%).

Salary Upon Promotion to Lieutenant

When a Sergeant promotes to Lieutenant, the employee's salary on promotion will be calculated as an eight percent (8%) increase over the employee's current base pay plus any P.O.S.T pay per the IPA MOU the employee is earning at the time of promotion, limited to the maximum of the Lieutenant range.

Management Incentive Pay

Employees in the IPMA Unit shall be eligible to receive 3% management incentive pay above their base salary, in recognition of the unique nature of their work.

Pay for Performance

Upon completion of a written performance review, employees may be eligible for merit adjustments in the following manner.

- Employees whose salary is below the maximum of their salary range, and who receive a "Meets Expectations" performance review, will be eligible for a 3% base salary adjustment up to the maximum.

- Employees whose salary is below the maximum of their salary range, and who receive an “Exceeds Expectations” performance review, will be eligible for a 4.5% base salary adjustment up to the maximum.

- Employees whose salary is below the maximum of their salary range, and who receive an “Outstanding” performance review, will be eligible for a 6% base salary adjustment up to the maximum.

- Employees whose salary is near the maximum of their salary range, and who receive a “Meets Expectations” or “Exceeds Expectations” or “Outstanding” performance review, will only receive that portion of the pay increase which increases their base pay up to the maximum of the salary range.

- Employees who receive a “needs improvement” performance review are not eligible for any salary increase.

- Employees whose salary is at the maximum of their salary range are not eligible for any salary increase.

- The dates for performance reviews and eligibility for merit pay adjustments will be adjusted for unpaid leaves of absence in excess of thirty (30) days.

Article 8 – Bilingual Pay

The Chief of Police shall designate which positions shall be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $115.00 per month, while serving in such positions and utilizing such designated second language(s).

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.
B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

Article 9 – Special Events Pay

It shall be the responsibility of the Chief of Police to monitor the application of the special events policy, and he has the authority to exercise management rights as outlined in Article II of this Agreement.

The Chief of Police may assign employees covered by this Agreement to work at a special event in a management capacity. Employees working in this capacity shall be compensated at one and one-half times the employee's classification's top range of pay plus professional achievement pay if the City is reimbursed at the employee's rate of pay. Otherwise the employee will be reimbursed at the Lieutenant rate.

Article 10 – Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage.

Medical

One (1) indemnity medical plan

Two (2) health maintenance organizations (HMO)

Dental

One (1) dental HMO (Guardian)

One (1) group dental PPO (Guardian)

Vision

One (1) vision care plan

The total cost to the City for medical, dental and vision insurance shall not exceed the following per month:

Employee Only	$694.04
Employee plus one	$754.04
Family	$1064.31

The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. To the extent provided by the Internal Revenue Code, any premiums paid by an employee through payroll deductions for insurance coverage described herein shall continue to be paid with pre-tax dollars.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XI, item A, above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XI, item A,

above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014 will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential impacts from or modifications to the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions toward health insurance benefits under the reopener, absent mutual agreement between the City and IPMA.

D. Employees not claiming dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. Citywide Insurance Committee

The Citywide Insurance Committee shall be composed of one representative from each of the following: Irvine Police Management Association, Irvine Police Association, Irvine Professional Employees Association, Irvine City Employees Association, Supervisory/Administrative employees, Management employees,

Confidential employees and the Manager of Human Resources who shall be the Chairperson of the Committee.

The functions of the Committee shall be to review coverages, cost containment methods, claims processing service, and claims experience. The committee will be provided with such information and claims history, and proposed changes in rates or coverage.

F. Disability Insurance

1. The City shall provide major disability coverage with benefits at 66- 2/3% of the employee's monthly earnings.

2. Pursuant to the City of Irvine Personnel Policy, the City shall continue to pay for the health, dental and vision (employee only vision) benefits for the first six months for the employee out on long-term disability.

G. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000, with a minimum amount of $85,000 and a maximum amount of $150,000.

H. Telecommunication Allowance

Employees shall be provided a $100 monthly allowance for cellular service. In addition, a reimbursement of up to $200 for cellular equipment will be provided upon receipt of invoice initially (following appointment to affected classification) and once every two years thereafter, if necessary to replace existing equipment. All purchases shall conform to the approved list of equipment as determined by the Chief of Police. All contracts for cellular service shall be between the provider and the individual.

I. Flexible Spending Account

The City shall administer a Flexible Spending Account (IRS Code Section 125) to provide employees a mechanism by which they may reduce their salary and pay for eligible expenses with pre-tax dollars. The Association agrees that the City will use

what legal means exist to recover costs for claims paid in advance of sufficient employee payroll deduction being made, upon the employee's separation from the City.

J. Take Home Vehicle

Employees in the unit shall be provided with a take home vehicle to facilitate the ability to immediately respond to after-hours emergencies ensuring the safety of, and reducing any further risk to, the community. California law allows the incidental and minimal personal use of City vehicles. Employee use of his/her take home vehicle to transport a family member(s), or other person(s) who is not an employee of the City, that is minimal in nature and consistent with legal restrictions, is permitted.

Article 11 - Retirement Plan and Retiree Health Insurance

A. Extension of Health Insurance Beyond Retirement

Any employee covered by this MOU who retires and has completed 15 years of service with the City or 10 years of service with the City and has reached the age of at least 50 years, or who has been medically retired at any age, shall be entitled to purchase the medical insurance plan in effect at the time. The employee shall pay the City premium group rates for employee and the employee's dependents, at the cost to the former employee, now retiree.

The spouse of an eligible retired unit member may continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of the retired employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

B. Retiree Health Benefits

1. Employees who previously participated in the Irvine Employees Benefit Trust (IEBT), formerly VEBA, administered by the Irvine Police Association (IPA) shall contribute an amount equal to 3% of the top step police sergeant base salary to the IPA IEBT. Effective the pay period including September 1, 2017,
    a. The City shall contribute on behalf of each employee, an amount equal to 1.25% of each employee's base salary to the IPA IEBT.
    b. The employee shall contribute the difference of the amount listed in Section B1(a) above and 3% of the top step sergeant base salary to the IPA IEBT.

2. All other employees shall contribute an amount equal to 3% of base salary to a Retiree Health Savings (RHS) account. Effective the pay period including September 1, 2017, this 3% contribution amount shall be allocated as follows:

    a. The City shall contribute an amount equal to 1.25% of base salary.
    b. The employee shall contribute an amount equal to 1.75% of base salary.

C. The provisions of section C shall apply to all new employees and to employees, as of February 2, 2002, who elected to waive their rights in the City of Irvine Defined Pension Plan and who elected to transfer to the CalPERS program through the irrevocable election process. All members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided by the City of Irvine Defined Benefit Pension Plan.

1. The City's contract with CalPERS shall include the following options:
    - 3% at 50 Full Formula for Local Police Safety Members (Cal. Govt. Code Section 21362.2)
    - One Year Final Compensation (Cal. Govt. Code Section 20042)

- Military Service Credit as Public Service (Cal. Govt. Code Section 21024), in which the employee pays the entire cost
- Post Retirement Survivor Allowance (Cal. Govt. Code Sections 21624, 21626 and 21628)
- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
- Fourth Level 1959 Survivor Benefits (Cal. Govt. Code Section 21574).

All employees hired on or after the effective date of the CalPERS contract (February 5, 2002) shall become members of the CalPERS Retirement Program. Employees who promote into IPMA, who had previously elected to waive their rights to the CalPERS program and remained in the City of Irvine Defined Benefit Pension Plan through the irrevocable election process, shall remain in the City of Irvine Defined Benefit Pension Plan and be covered by its provisions as noted in their former MOU.

Once a member of the CalPERS Retirement Program, such participation shall continue until the employee terminates employment with the City for any reason.

2. All "New Members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the Sworn Tier 3 Plan; 2.7% at 57.

3. <u>Member Contribution</u>

a. All "New Members" hired by the City on or after January 1, 2013 will pay the full employee contribution, which will be one-half the normal cost rate as determined by CalPERS.

b. For employees who are members of the City's 3% at 50 CalPERS plan, the full nine percent (9%) member contribution will be paid by the member,

through pre-tax payroll deduction. The City has adopted the CalPERS resolution in accordance with IRS Code section 414(h)(2) to ensure that the employee contribution is made on a pre-tax basis.

4. Cost Sharing:

All unit members enrolled in CalPERS who are not new members under PEPRA shall contribute an amount through payroll deductions equal to an additional three percent (3.0%) of compensation earnable as cost sharing of the City's required contribution to CalPERS under Government code section 20516(f). These cost sharing deductions shall be made on a pre-tax basis to the extent allowed under applicable law. These employees are responsible for paying an additional pension contribution of three percent (3%) as cost sharing in accordance with Government Code section 20516(f), for a total employee pension contribution of twelve percent (12%). Effective January 1, 2018, to the extent permitted by law, the parties agree that this additional three percent (3%) shall be considered member contribution per Government Code section 20516.5. However, the City shall be under no obligation to amend its contract with CalPERS in order to ensure that the three percent (3%) is treated as employee contribution.

5. Uniform Evaluation

Sworn officer uniforms will be valued annually and shall be expensed for PERS purposes **(**except for "new members" as defined by PEPRA) on a bi-weekly basis. The uniform valuation amount is $25.47 per pay period.

Article 12 - Police Management Professional Achievement Plan Program

1. An employee will be eligible for a seven percent (7%) Professional Achievement benefit upon completion of a California P.O.S.T. Management course. This benefit shall cease if the employee is not eligible and/or does not apply for his/her P.O.S.T. Management Certificate within two years of being promoted.

2. An employee will be eligible for an additional five percent (5%) Professional Achievement benefit upon completing a two-year P.O.S.T Command College or attaining a Master's Degree in Criminal Justice, Sociology, Public Administration, Business Administration, or a related field from an accredited college or university. The five percent (5%) benefit shall be calculated on a base amount that includes the seven percent (7%) benefit described in Section 1 above.

Article 13 – Administrative Leave

Employees shall not be required to charge accrued paid leave accounts or take leave without pay for an absence of less than four hours for personal reasons. Effective the first full payroll period in January of each year, employees will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for Police Management employees appointed into the IPMA unit during the calendar year. Additional Administrative Leave may be approved by the department director or City Manager. Administrative Leave must be used by the end of the calendar year and such hours shall not be accrued from year-to-year or paid off upon termination.

Although an employee will not be required to charge accrued paid leave accounts or take leave without pay for an absence of less than one day, employees who will be absent from work for more than one day, are required to receive approval from the Chief of Police or his/her designee before such leave is taken.

Article 14 – Annual Physical Examination

The City shall reimburse Police Lieutenants and Police Commanders to a maximum of $500 for expenses incurred as a result of an annual physical examination. An annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 15 - Leaves

A. Vacation

Police Commanders and Police Lieutenants shall accrue vacation credits on a monthly basis as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	120 hours	360 hours
after 3 through 10	160 hours	480 hours
after 10 or more	200 hours	600 hours

"Years of Service" is defined as consecutive, full-time service with the City of Irvine. When an employee earns vacation in excess of the cap on accrual, the employee shall be paid for the vacation during the pay period earned and the employee's base rate of pay. The times during a calendar year at which an employee may take his/her vacation shall be determined by the Chief of Police or his/her designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays occur while an employee is on an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination. Accrued vacation will be cashed out at the final rate of pay, which is base rate plus any Police Management and Professional Achievement Plan incentive pays to the extent that an employee qualifies for the particular incentive pay.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to forty (40) hours of accrued vacation (in eight hour increments) which will be earned in the following

calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue Personal Sick Leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or designee two (2) hours prior to the time set for beginning his or her daily duties, or as may be specified by the director of his/her department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer, stating the nature of the illness.

An employee receiving temporary disability payments under the Workers' Compensation Laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

D. Personal Sick Leave Conversion

1. Personal Sick Leave Conversion –Upon honorable separation from service, which includes a disability retirement, a service retirement, or a layoff, a regular employee's sick leave accruals will be converted based on the sick leave conversion schedule shown below:

Years of Service	Conversion Rate
0 through 5	0
5 through 10	33%
10 through 20	50%
20 through 25	80%
25 +	90%

"Years of Service" is defined as consecutive, full-time service with the City of Irvine. Upon separation from the City, the converted value of sick leave accruals will be transferred to the Sick Leave Conversion/Retiree Premium Reimbursement Plan.

2. Upon promotion to an unrepresented sworn position with the City, sick leave over 250 hours will be converted into a Retiree Health Savings Account. Conversion rate is based on years of service as referenced in 1., above.

E. Personal Leave

1. Effective the pay period which includes January 1 of each year employees will receive seventy-two (72) hours of personal leave. Such hours shall not be carried over from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 72 hours. Regular and probationary employees who commence employment with the City or return from an unpaid leave of absence from the City after January 1 will receive twenty-four (24) hours less Personal Leave for every four (4) months the employee is not on paid status with the City.

2. The employee shall notify his/her immediate or designated supervisor of the use of a Personal Leave day at least 24 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Employees shall receive up to forty (40) hours per calendar year for absence necessitated by the death of immediate family members. Employees who commence employment with the City or return from an unpaid leave of absence from the City after January 1, will receive eight (8) hours less Bereavement Leave for every three (3) months the employee is not on paid status with the City.

The immediate family shall be defined as the spouse, registered domestic partner, children, parents, brothers, sisters, grandparents, parents-in-law, grandparents in-law or other individuals whose relationship to the employee is that of a dependent or a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

Where such death has occurred and upon request of the department director the employee shall furnish satisfactory evidence of such death.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay upon approval from the City Manager not to exceed 180 calendar days per year upon presentation of evidence to his/her department director of the birth or adoption of the employee's child. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Military Leave

An employee shall be entitled to such benefits as are provided by law. An employee requesting such military leave, shall present a copy of his/her military orders to his/her department director prior to the beginning of the leave.

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to 80 hours in a pay period.

Article 16- Holidays and Holiday Pay

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King, Jr. Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

The City shall determine the actual dates for each of the eleven (11) foregoing holidays. Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. These provisions shall not apply to employees who work on the following holidays which shall be observed on the actual dates: New Year's Day-January 1; Independence Day-July 4; Christmas Eve-December 24; and Christmas Day-December 25.

Employees required to work without regard to Holidays, shall receive a total of 110 hours Holiday compensation each calendar year for all recognized Holidays listed in this

Article. Holiday compensation shall be paid in the pay period of the recognized Holiday. All Holiday compensation will be paid at an employee's hourly base salary or at one and one-half times his/her base rate as described below in this article.
Employees who work a shift on a holiday which has been designated as such by the City shall receive regular compensation consisting of ten (10) hours of pay at his/her normal salary rate plus compensation at one-and one-half times his/her normal rate for hours actually worked.

Employees who do not work on a holiday shall receive pay for such holidays in an amount equal to their base hourly rate of pay times ten (10) hours provided they are in a paid status for all or a portion of both the regularly scheduled workday immediately prior to the holiday and the regularly scheduled workday immediately after the holiday. To the extent the City is permitted by Title 2 California Code of Regulations, section 571(a)(5) to report holiday compensation to CalPERS it will do so.

Any employee who is either on his/her regularly scheduled days off or who has been assigned the day off on any City holiday will receive the ten (10) hours Holiday Pay, plus time and one-half for any hours actually worked. As provided herein, paid status shall include any lawful absence by the employee for sick leave, family sick leave, personal leave, holiday, vacation, and any other paid leave of absence or time taken for compensatory time off.

Article 17 – Plain Clothes Assignments

Employees working in plain-clothes assignments may (with the provision of receipts) receive up to $300 per year in reimbursement for clothing costs.

Article 18 – Education Reimbursement

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, hotel and meal expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

Article 19 - City Manager's Award for Employee Achievement

Management may recommend an employee achievement program that will provide financial awards to regular full-time and/or regular part-time City employees.

Article 20 - Hours of Work

The employees' work schedule shall be ten (10) hours per day including briefing and lunch, for four (4) days during their FLSA workweek. Management will determine shift starting times and shift configuration under the 4-10 plan.

Article 21- Promotions

A. Promotion to Police Commander and Deputy Police Chief

Employees meeting the minimum qualifications will have the opportunity to seek promotion to the ranks of Police Commander and Deputy Police Chief as vacancies occur at those ranks. The parties agree that the Chief of Police has the right to make a direct appointment to the classifications of Police Commander and Deputy Police Chief without utilizing a recruitment process.

If there are three candidates who meet the minimum qualifications for Police Commander, the City will fill the vacancy with an internal candidate. For the rank of Deputy Police Chief, the City retains the right to fill that vacancy either with an internal or external (from outside the City) appointment.

Article 22 – Layoff

For purposes of determining layoffs/demotions based on a reduced work force, seniority will be determined by total time as a full-time sworn employee of the Irvine Police Department. All other seniority within the department is based on time in grade by classification.

Article 23 - Completion of Meet and Confer Process

Each of the parties hereto agrees that it has had a full and unrestricted right to make, advance, and discuss all matters properly within the scope of meet-and-confer in accordance with State laws and local ordinances and regulations. Except as otherwise provided herein during the term of this MOU, the parties expressly waive and relinquish the right to meet and confer except by their mutual consent with respect to any subject or matter, whether referred to or covered by this MOU or not, even though each subject or matter may not have been within the knowledge or contemplation of either or both the City and Association at the time they met and conferred or executed this MOU, and even though subjects or matters were proposed and later withdrawn. The express provisions of this MOU constitute the only limitations upon the City's rights to determine, implement**,** supplement, change, modify, or discontinue in whole or in part any term or condition of employment or adopt any policy, rule, regulation or practice as the City deems fit and appropriate, provided, however, that the City shall comply with all federal and State laws relating to employee rights, opportunities, and benefits, except for the requirement to meet and confer with regard to such change, alterations, modifications, or exercise of the reserve powers of this MOU, which right has been expressly waived by the Association.

Article 24 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppages, the Association hereby agrees that during the term of this MOU and through the completion of labor negotiations or until either party declares impasse , neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature against the City whatsoever, or wheresoever located, including but not limited to disputes which are related to the subject matter contained in this MOU; disputes which are specifically not subjects of this MOU; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, the Association and its officers will take all steps reasonable within their control to end or avert the same.

Those represented by the Association will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by the Association found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to personnel rules and regulations.

Article 25 - Term

The terms and conditions of the MOU will be effective the date of City Council approval of the Agreement unless otherwise stated in the MOU.

The Agreement shall remain in force and effect until June 30, 2019, and supersedes all other agreements between the parties.

CITY OF IRVINE	IRVINE POLICE MANAGEMENT ASSOCIATION
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
	By:_____
	By:_____
	By:_____
	By:_____
	By:_____
	By:_____

ATTACHMENT I

IRVINE POLICE MANAGEMENT ASSOCIATION
Schematic Arrangement of
Class Titles and Salary Ranges
for Police Lieutenants and Police Commanders (Exempt)

CLASS TITLE	APPROXIMATE MONTHLY EQUIVALENT	APPROXIMATE ANNUAL RATE
	Effective September 1, 2017	
Police Lieutenant	$10,185-14,317	$122,221-171,808
Police Commander	$11,017-15,519	$132,205-186,222
	Effective July 1, 2018	
Police Lieutenant	$10,390-14,603	$124,675-175,240
Police Commander	$11,237-15,829	$134,846-189,946

ATTACHMENT II

CITY OF IRVINE – IRVINE POLICE MANAGEMENT ASSOCIATION TRANSITION AGREEMENT FOR PERS BENEFITS

This Transition Agreement ("Agreement") is entered into effective as of July 1, 2001, by and between the City of Irvine ("City") and the Irvine Police Management Association ("IPMA") pursuant to Article XII of the Memorandum of Understanding ("MOU") between the City and the IPMA effective July 1, 2001. This Agreement sets out details for transition from the existing City Sworn Police Defined Benefit Pension Plan ("City DB plan") to the California Public Employees' Retirement System ("PERS") for providing retirement and related benefits to IPMA represented, active City employees ("IPMA employees") as of January 1, 2002.

BACKGROUND FACTS

A. The City and the IPMA have entered into an MOU under which the City will contract with PERS for PERS to provide retirement benefits to IPMA employees instead of the City providing retirement benefits under the City DB plan.

B. The level and type of benefits that will be provided by PERS to IPMA employees are provided in Article XII of the MOU. The specific benefits are governed by PERS rules and regulations.

C. Under the MOU, the provision of benefits by PERS to IPMA employees is contingent upon a number of events, set out below.

AGREEMENT

The City and IPMA agree as follows with respect to the provision of retirement and related benefits by PERS to active City employees who are represented by IPMA:

1. Agreement Is Part of the MOU

   This Agreement is an integral part of the MOU, and is based on the same consideration that supports the MOU.

2. PERS Benefits are Contingent

   The PERS benefits provided in Article XII of the MOU shall be provided to active IPMA employees only upon the occurrence of all of the following events:

   a. The City and PERS shall enter into an agreement that is reasonably satisfactory to the City for PERS to provide such benefits. The City shall make reasonable efforts to enter into such an agreement by January 5, 2002.

   b. The Irvine Police Association shall enter into an agreement with the City that is substantially the same as this Agreement, for its represented employees, prior to any execution of an agreement between the City and PERS.

   c. A sufficient majority of IPMA employees and other qualified employees elect to participate in PERS instead of the City DB plan to provide retirement and related benefits. The election shall be conducted in accordance with PERS rules and the sufficient majority shall be determined in accordance with PERS rules.

   d. If a sufficient majority elects PERS instead of the City DB plan, each existing IPMA-represented employee is given a one time irrevocable option to waive out of the City DB plan and to instead become a member of PERS for his or her retirement and related benefits. Such option shall be exercised at the time and in the manner established by the City in accordance with PERS rules.

   e. The transfer of appropriate plan assets from the City DB plan to PERS is completed pursuant to an agreement between the City and PERS.

3. Effective Date of Change to PERS

   a. The effective date of the PERS retirement plan shall be January 5, 2002, or as soon thereafter as is practical pursuant to an agreement between the City and PERS.

b. No change shall be effective prior to the date that all elections and choices described herein are completed, all necessary or appropriate agreements have been executed with PERS, and all necessary and appropriate actions taken under such agreements.
c. Prior to the effective date of a change to PERS (if any), the terms and conditions of the City DB plan shall govern the benefits of all IPMA-represented employees. Therefore, for example, the City DB plan shall govern the benefits paid and payable to IPMA employees prior to such effective date for events such as: retirement, death, disability and purchase of service.

d. The City shall expeditiously take all reasonable steps to provide for an effective date of January 5, 2002. However the City and IPMA recognize and acknowledge that PERS has authority over the timeline for implementation and may be unable to act as quickly as is preferred by either the City or the IPMA.

4. Benefits And Other Factors May Be Changed In The Future

a. The optional PERS benefits that will be provided to active IPMA employees are provided in Article XII of the MOU, subject to this Agreement and PERS rules.

b. Except to the extent required by law and subject to vested rights acquired by affected employees, the City does not promise that these PERS benefits, or the benefits provided by the City DB plan, will remain unchanged after the end of the current term of the MOU. The IPMA explicitly acknowledges the limitation set out by this section.

c. Subject to vested rights acquired by employees, other factors that may affect benefits paid from the City DB plan and from PERS may also change in the future, including but not limited to the method of plan governance and the investment strategy and results of each of these plans. The IPMA explicitly acknowledges that such factors may change.

5. Elections Required To Join PERS

a. All active employees represented by the IPMA, and other eligible employees pursuant to rules of PERS, including the current active members of the IPA, will

participate in an election to choose (or not choose) PERS instead of the City DB plan.

b. The election shall occur at the time and place and in the manner prescribed by PERS rules and in accordance with the agreement between the City and PERS.

c. If a sufficient majority (as defined by PERS rules) votes to choose PERS to provide retirement and related benefits, then each IPMA-represented employees shall have the right to individually waive out of the City DB plan and instead transfer to PERS. Such choice shall be allowed only once for any current active IPMA-represented employee and his or her choice shall be irrevocable.

d. Any IPMA-represented employee who transfers to PERS shall have his or her retirement and related benefits provided by PERS pursuant to the provisions of Article XII of the MOU. All factors and other elements that are used to determine the amount and form of benefits payable from PERS shall be as provided by PERS, and shall not be governed by the City DB plan.

e. Prior to any election and any individual choice described in section 5,c above, the City will request that PERS take reasonable steps to provide each IPMA-represented employee with generally relevant information concerning PERS. Each IPMA-represented employee has the individual responsibility, however, to obtain all information that is relevant for his or her benefits and for his or her decision in an election or individual choice. The City expressly disclaims all responsibility for any decision in an election or individual choice made by any IPMA-represented employee with respect to participating in PERS or in the City DB plan.

f. Every employee represented by IPMA who is hired by the City on and after the effective date on which retirement and related benefits are provided to IPMA employees from PERS shall automatically participate in PERS for those benefits and shall not be eligible to participate in or receive any benefits from the City DB plan (or any other retirement plan) of the City.

6. Transfer of Assets to PERS from the City DB Plan
    a. If the conditions required for a transfer from the City DB plan to PERS are satisfied, then the City shall direct the Board of Trustees of the City DB plan to transfer all appropriate assets (except as provided below) of the City DB plan directly from the trust of the City DB plan to the appropriate PERS fund. Such transfer shall occur at the time and in the manner set out by agreement between the City and PERS and in accordance with the PERS rules.

    b. Assets shall be retained in the trust fund under the City DB plan in an amount to pay for benefits accrued to date and reasonably projected to be accrued during the relevant plan members' remaining working lifetime for IPMA employees who choose to remain in the City DB plan.

7. Transfer of Liabilities for Benefits to PERS from the City DB plan
    a. If the conditions required for a transfer from the City DB plan to PERS are satisfied, then any responsibility and liability for retirement benefits will be assumed by PERS according to the provisions of the MOU, PERS rules and the agreement between the City and PERS. For employees who elect to participate in PERS, the City DB plan will no longer be liable for any benefits.

    b. Liabilities for benefits shall be retained by the City DB plan for benefits earned by IPMA employees who choose to remain in the City DB plan.

8. Administration of the City DB plan
    a. Prior to a transfer (if any) of any assets or liabilities from the City DB plan to PERS, the City DB plan shall be governed in accordance with the current plan document, trust document and current practices.

    b. The City shall have full responsibility and authority, as Plan Administrator of the City DB plan, to implement any agreement of transfer of assets and benefit liabilities from the City DB plan to PERS.

c. The Board of Trustees under the City DB plan shall be directed by the City to cooperate to the fullest possible extent with the Plan Administrator, the City, and PERS to transfer and to facilitate the transfer of assets of the City DB plan to the appropriate PERS fund.

d. After the transfer (if any) of assets from the City DB plan to PERS has been substantially completed, the City shall amend the City DB plan to reconstitute the Board of Trustees to consist of one or more persons who can most appropriately (in the judgment of the City) act as trustee for the limited amount of assets remaining in the City DB plan. The City shall also amend the City DB plan to limit the role of the Committee under the City DB plan to making disability determinations in the manner that it currently does.

9. Termination of the City DB plan

Subject to the requirements of federal tax law governing qualified retirement plans, when all liabilities for benefits payable under the City DB plan have been paid or provided for (e.g., by transfer of assets and liabilities to PERS and/or by purchase of an annuity contract from a third party), then the City at its sole discretion may terminate and dissolve the City DB plan. On termination and dissolution, any plan assets that are in excess of liabilities shall revert to the City.

10. Miscellaneous

a. The City, as administrator of the City DB plan and contracting employer under any PERS contract, shall have the responsibility and the authority to take all actions reasonable and appropriate to implement this Agreement, including but not limited to interpreting its provisions.

b. To the extent that conflict exists between this Agreement and the MOU, this Agreement shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

_____

_____

_____ ,2001

IRVINE POLICE MANAGEMENT ASSOCIATION

_____

_____

10-25 , 2001

ATTACHMENT IV

IPMA SIDE LETTER AGREEMENT TO MOU
SALARY ON PROMOTION
CONTRACT PERIOD 7/16/05 – 6/30/07

Effective with the 2005 – 2007 MOU, the following modifications will be made:

For Sergeants promoted to Lieutenant, the salary on promotion will be calculated as an 8% increase over the current base pay plus any Police Management Professional Achievement Program (P.O.S.T.) pay, pursuant to Article XV of the IPA MOU, being earned at the time of promotion, limited to the maximum of the range.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

Rick Rudd

Jan Walden

August 5, ,2005

IRVINE POLICE MANAGEMENT ASSOCIATION

August 3 , 2005

ATTACHMENT VI

IPMA SIDE LETTER AGREEMENT TO MOU
SALARY DIFFERENTIALS
CONTRACT PERIOD JULY 1, 2007 – JUNE 30, 2009

The 2007-2009 Memoranda of Understanding between the Irvine Police Management Association and the City of Irvine contains two references to differentials among the Lieutenant, Commander and Deputy Chief classifications. (Reference Article VIII-Wages and Attachment I).

These provisions are not applicable during this contract period, unless the salary for Deputy Chief is increased in July 2008 to an amount greater than 9.59% over the top of range for Commander.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

Jan Walden

,2007

IRVINE POLICE MANAGEMENT ASSOCIATION

, 2007

ATTACHMENT VII

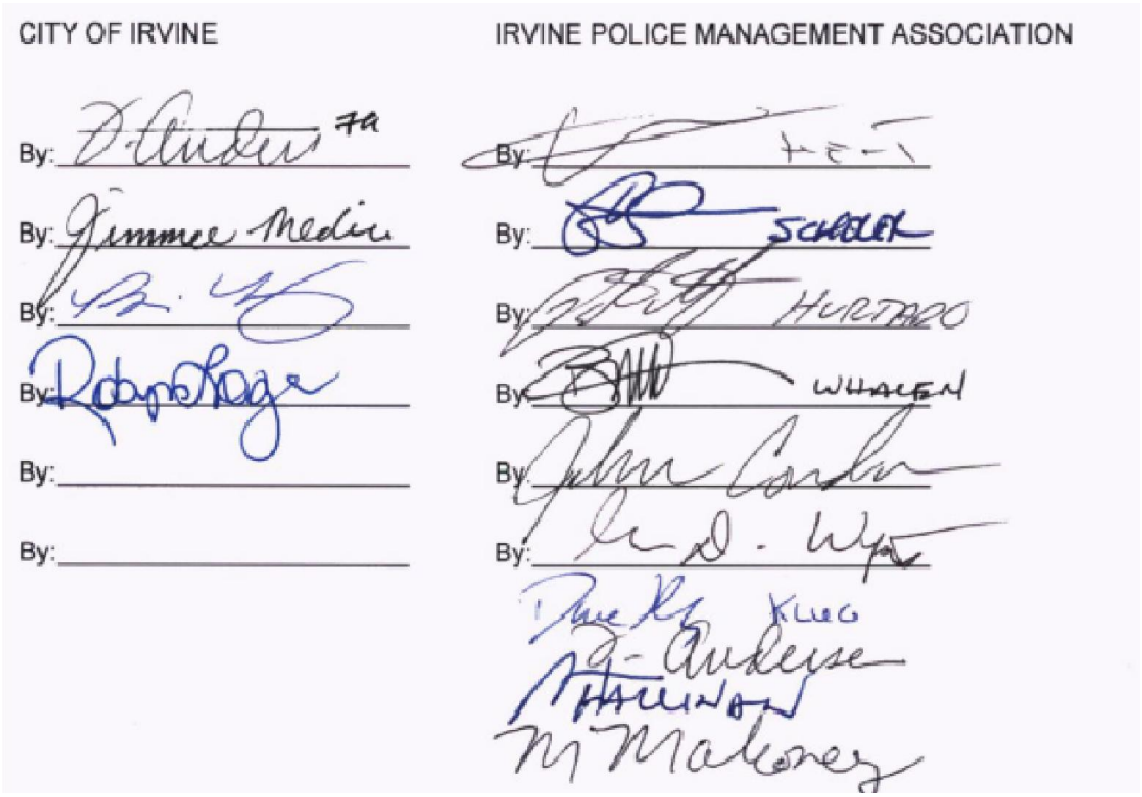
IPMA Side Letter Agreement to MOU
Amendment to Holiday Pay
Contract Period: August 11, 2015 – August 10, 2017
Effective August 11, 2015

Effective with City Council Resolution 16-46, modifications were made to the following MOU Article:

HOLIDAY PAY

The amendment to Article XVIII, Holidays and Holiday Pay enacted on June 14, 2016 in the Memorandum of Understanding between the City of Irvine and Irvine Police Management Association for the time period of August 11, 2015 through August 10, 2017, shall be incorporated in the Memorandums of Understanding for the time periods of:

August 11, 2013 through August 10, 2015
August 11, 2011 through August 10, 2013 (amendment to extend the 2009-2011 MOU)
July 1, 2009 through June 30, 2011



Attachment VIII – Disciplinary Appeals Process

The following administrative appeal process is established pursuant to *Government Code* section 3304.5. This procedure shall not apply to disciplinary actions for which unit members already are entitled to receive an appeal hearing pursuant to Article VI of the this MOU for demotion, dismissal, reduction in pay for disciplinary reasons, or suspension without pay. Moreover, this procedure shall not apply to appeals of punitive transfers, i.e. transfers which are imposed as corrective action following alleged misconduct by officers irrespective of whether a transfer will result in a loss of pay. A transfer which is not expressly intended as corrective action shall not be considered a punitive transfer regardless of whether it results in a loss of pay.

This procedure shall only apply to written reprimands, non-punitive transfers which result in a loss of pay, and any other punitive actions (as that term is defined by *Government Code* section 3303).

1. Right to Administrative Appeal

   A. Any unit member who is subjected to punitive action (within the meaning of *Government Code* section 3303) other than one which may be appealed pursuant to Article VI of this MOU.

   B. The member shall not be entitled to appeal a punitive action prior to its imposition.

   C. A unit member who appeals a punitive action under this procedure shall bear his/her own costs in association with the appeal hearing, including but not limited to any and all attorney fees.

2. Notice of Appeal

   A. Within ten (10) calendar days of being notified of a punitive action, the unit member shall notify the Chief of Police in writing of his/her intent to appeal the punitive action.

B. The notice of appeal shall specify the action being appealed and the grounds for the appeal.

C. Failure to timely serve written notification of an appeal shall result in waiver of any right to appeal.

3. Hearing Officer

A. The Chief of Police shall have ten (10) calendar days from receipt of the notice of appeal to appoint a hearing officer who is not embroiled in the controversy, i.e. a person who did not initiate or directly authorize the action in question.

1. The Chief of Police shall have discretion to appoint an employee of the City or a professional hearing officer, mediator or arbitrator to serve as the hearing officer.

2. The Chief of Police shall have discretion to serve as the hearing officer.

B. The hearing officer shall serve in an advisory capacity and shall be responsible for making recommended findings of fact and issuing an advisory decision to the Chief of Police. The Chief of Police may adopt, modify, or reject the hearing officer's recommendations and advisory decision and the Chief's decision shall be final and binding.

C. If the Chief of Police initiated, or directly authorized the punitive action being appealed, then the Personnel Officer of the City shall assume the responsibilities otherwise assigned to the Chief of Police under this procedure.

4. Burden of Proof/Persuasion

A. If the action being appealed does not involve allegations of misconduct (i.e. allegations that the officer has violated one or more federal, state, or local laws, and/or City or Police Department regulations, procedures, or rules), then the

limited purpose of the hearing shall be to provide the officer the opportunity to establish a record of the circumstances surrounding the action. The Department's burden shall be satisfied if the Department establishes that the action was reasonable, even though reasonable persons might disagree about whether the action was the best one under the circumstances.

B. If the action being appealed does involve allegations of misconduct (i.e. allegations that the officer has violated one or more federal, state, or local laws, and/or City or Police Department regulations, procedures, or rules) the Department shall have the burden of proving by a preponderance of the evidence the facts which form the basis for the charge of misconduct and the burden of persuasion that the punitive action was reasonable under the circumstances.

5. Conduct of Hearing

A. The formal rules of evidence do not apply, although the hearing officer shall have discretion to exclude evidence that is incompetent, irrelevant or cumulative, or the presentation of which will otherwise consume undue time.

B. The parties may present opening statements.

C. The parties may present evidence through documents and testimony. Witnesses shall testify under oath. The oath may be administered by the hearing officer.

D. The parties shall only be entitled to confront and cross-examine witnesses if the punitive action involves charges of misconduct.

E. Following the presentation of evidence, if any, the parties may submit oral and/or written closing argument for consideration by the hearing officer.

6. Record of Hearing

If the punitive action involves an allegation of misconduct, then the hearing may be tape-recorded. The cost to receive a transcript of the hearing shall be borne by the party requesting the transcript.

7. Representation

The unit member may be represented by an association representative or attorney of his or her choice at all stages of the proceedings. All costs associated with such representation shall be borne by the unit member.

The Department shall also be entitled to representation at all stages of the proceedings.

8. Decision

A. The hearing officer should issue his/her advisory decision in writing within fifteen (15) calendar days of the submission of the case by the parties for decision. The written decision shall set forth proposed findings of fact and a proposed decision.

B. Within ten (10) calendar days of receipt of the advisory decision, the Chief of Police should serve the parties with written notice of his/her decision adopting, modifying, or rejecting the hearing officer's recommendations and decision.

If the Chief of Police modifies, or rejects the hearing officer's decision, then he or she shall review the entire record prior to making a decision.

The decision shall be served by first class mail, postage pre-paid, upon the unit member as well as his/her attorney or representative, shall be accompanied by an affidavit or certificate of mailing, and shall advise the unit member that the time within which judicial review of the decision may be sought is governed by *Code of Civil Procedure* section 1094.6.

CITY OF IRVINE

By:_____

By:_____

By:_____

By:_____

By:_____

IRVINE POLICE MANAGEMENT ASSOCIATION

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, revisions have been made to the Classification and Compensation Policy.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. SALARY RANGES

The pay grades of classifications to which confidential employees are assigned shall be as set forth in the Schematic Arrangement of Class Titles and pay grades as shown in Attachment I and be effective the pay period that includes August 11, 2017.

SECTION 2. OTHER COMPENSATION COMPONENTS

Eligible confidential employees shall receive additional compensation benefits as follows:

1. Pension

A. The provisions of this Section 2.1 shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

1. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Employees shall become fifty percent (50%) vested in such plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of five percent (5%) for every Plan Year in which the employee completes one-thousand (1000) hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

2. The City will deduct an amount equal to 6.552% of each employee's base salary to invest in the City of Irvine DCPP this payroll deduction shall be mandatory fo elected to remain in the City of Irvine DCPP.

3. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present, or future, as provided under Section 2.1.B of this Resolution. Employees, who elected to remain in the City of Irvine DCPP, shall continue

participation until the employee terminates his/her employment from the City for any reason.

4. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

B. The provisions of this Section 2.1.B shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

1. The City's contract with CalPERS shall include the following options:

   a. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)

   b. One Year Final Compensation (Cal. Govt. Code Section 20042)

   c. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

   d. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)

   e. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)

   f. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

2. All eligible employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program.

3. All active employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Section 2.1.A above.

4. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

5. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

6. Employer-Paid Member Contributions and New CalPERS Tiers:
   a. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.

b. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

c. All "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

2. Retiree Health Plan

A. 1. For employees in classifications covered by this Resolution and listed in Section A. of Attachment I, the City shall contribute an amount equal to three percent (3%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered in this Resolution.

2. For employees in classifications covered by this Resolution and listed in Section B. of Attachment I, the City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered by this Resolution.

B. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

C. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

3. Health Insurance Benefits

The City shall provide the following options to the employees for employee and dependent coverage, with noted exceptions.

A. Indemnity Medical Insurance
The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

B. Indemnity Dental Insurance
The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

C. Health and Dental Maintenance Organizations
The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

E. Vision Care Plan
One (1) vision care plan.

F. For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological and vision insurance shall not exceed $694.04 per month, per employee, $754.04 per month, per employee plus one (1) dependent or $1,064.31 per month per employee plus family. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

G. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in item F., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in item F., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

4. Disability Insurance

The City shall provide a long-term disability insurance plan for employees.

5. Life Insurance

A. For employees listed in Section A of Attachment I:
The City shall provide a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000 for each employee effective the first month following adoption of this Resolution.

B. For employees listed in Section B of Attachment I:
The City shall provide a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000 for each employee effective the first month following adoption of this Resolution.

6. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code Sections 125 and 129. The City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

7. Vacation

A. Employees listed in Section A of Attachment I shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits
1 through 3	80 hours
After 3 through 7	120 hours
After 7 through 10	130 hours
After 10 years or more	160 hours

B. Employees listed in Section B of Attachment I shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits
1 through 3	120 hours
After 3 through 10	160 hours
After 10 years or more	200 hours

Employees may not accrue more than eighty (80) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The dates an employee may take his/her vacation shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays falls within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump-sum for all accrued but not used vacation leave earned prior to the effective date of termination.

8. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

9. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify her/his immediate supervisor or the Personnel Officer prior to or within one (1) hour after the time set for beginning her/his daily duties, or as may be specified by the head of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer or designee.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Manager. An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

10. Personal Sick Leave Conversion

Regular employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of one-hundred sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of 168 hours at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave hours to vacation hours.

Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Retiree Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the RHS account shall occur as follows:

A. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

B. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

   Upon separation from the City, regular full-time employees must convert all remaining sick leave hours into their respective individual accounts in the Retiree Health Savings Plan, as follows:

   1. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

   2. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause shall not be eligible to convert their sick leave into the Retiree Health Savings Plan.

11. Personal Leave

Effective the pay period which includes January 1st of each year, employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

12. Administrative Leave

Effective the first pay period beginning in January of each year, employees in Schedule B of Attachment I will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for supervisory/administrative employees appointed during the calendar year. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not be accrued from year to year or paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 40 hours.

13. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year. The immediate family shall be defined as mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child, grandparent, grandparents in-law, grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

14. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the

City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child to the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

15. Education Reimbursement/Professional Development

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

16. Physical Examination

The City shall reimburse employees in Schedule B of Attachment I up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

17. Holidays

The recognized holidays to be observed by the City in each calendar year shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for each of these holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted equivalent compensatory time off, in lieu of pay, within the pay period in which the holiday falls. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

18. Overtime Compensation

For employees listed in Section A of Attachment I, hours worked or earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one and one-half (1 ½) times the employee's hourly rate when such work is authorized by the Department Director and approved by the City Manager.

19. Compensatory Time

Employees listed in Section A of Attachment I may accumulate a maximum of eighty (80) hours compensatory time in lieu of overtime compensation (see 16 above) on the basis of one and one-half (1 ½) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

20. Stand-by Time

Regular full-time employees listed in Section A of Attachment I shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments. If a City holiday falls on a weekend, employees on standby will receive an additional two (2) hours standby pay for each of these holidays.

21. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

22. Military Leave

Employees shall be entitled to such benefits as are provided by law. An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director or the City Manager prior to the beginning of the leave.

23. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

A. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

B. The employee shall accrue sick leave and vacation leave during the term of the Industrial Accident Salary Continuance;

C. The employee's condition is not permanent and stationary as determined by the City's appointed physician.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

24. Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

25. Select Benefits Program

The City will provide a cafeteria-style benefit program for confidential employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

B. Employees not claiming any dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

C. Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

26. Wage and Salary Range Adjustment

A. Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

B. Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All

base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay provided according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or Equal to Maximum Range		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

C. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary merit review. All subsequent performance reviews will be according to the same merit schedule as other regular employees. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

27. Bilingual Pay Program

Department Directors shall annually designate which positions will be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following her/her return to work. The employee will not be required to perform bilingual interpretation services during any period in which he/she are not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee, who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

   An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

SECTION 3. SEVERANCE

In the event of a lay-off within a designated classification or classification series, the City Manager shall be authorized at his/her discretion to enter into a severance agreement with impacted employees.

SECTION 4. ADMINISTRATION OF COMPENSATION POLICY

The Personnel Officer shall establish procedures for the efficient administration of the compensation policy described in this Resolution.

The City Manager shall approve procedures for movement of an individual employee through salary ranges. Such procedures shall be reviewed annually. All adjustments to the salary ranges contained within this Resolution shall be approved by the City Council.

SECTION 5. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 6.

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT I

CLASS TITLES
FOR CONFIDENTIAL EMPLOYEES

A.	POSITION TITLE	PAY GRADE
	Administrative Secretary	7
	Program Assistant	7
	Administrative Aide	8
	HRIS Specialist	10
	Human Resources Specialist	9
	Program Specialist	9

B.	POSITION TITLE	PAY GRADE
	Administrative Coordinator (c)	9
	Budget Officer	18
	Human Resources Analyst I	11
	Human Resources Analyst II	13
	Management Analyst	11
	Payroll Process Analyst	11
	Payroll Supervisor	14
	Senior Human Resources Analyst	15
	Senior Management Analyst (c)	15
	Human Resources Administrator	18
	Risk Management Administrator	18
	Strategic Business Plan Administrator	18

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, revisions have been made to the Classification and Compensation Policy.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. ANNUAL COMPENSATION FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES

The pay grades for Management and Non-Represented Employees of the City of Irvine shall be set forth as shown in the applicable salary resolution adopted by the City Council.

SECTION 2. OTHER COMPENSATION COMPONENTS

Eligible exempt Management and Non-Represented employees shall receive additional compensation benefits as follows:

1. Pension:

   A. The provisions of this Section 2.1 shall apply to all employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

      1. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP) for employees who are actively employed in the unit on or after this Resolution is approved by the City Council. Employees shall become fifty percent (50%) vested in such plan upon completion of the initial six months of employment. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

      2. The City will deduct an amount equal to 6.552%of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elect to remain in the City of Irvine DCPP.

3. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present or future, as provided under Section 2.1.B of this Resolution. If employees elected to remain in the City of Irvine DCPP, such participation shall continue until the employee terminates their employment from the City for any reason.

4. The City will utilize retirement plan forfeitures to offset the cost of City of Irvine DCPP account management and administrative fees.

B. The provisions of this section B.1 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

1. The City's contract with CalPERS shall include the following options:

   a. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)

   b. One Year Final Compensation (Cal. Govt. Code Section 20042)

   c. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

   d. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)

   e. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)

   f. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

2. All eligible employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program.

3. All active eligible employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Section 2.1.A above.

4. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

5. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

6. Employer-Paid Member Contributions and New CalPERS Miscellaneous Tiers

   a. The full eight percent (8%) cost of the CalPERS member contributions will be paid by the employee.

   b. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all miscellaneous employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

   c. All "new members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

C. The Sworn employees listed in Attachment I shall become a member of the CalPERS retirement plan for local safety employees, pursuant to the contract between the City and CalPERS.

   1. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

   2. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

      For employees who are members of the City's 3% at 50 CalPERS, the full nine percent (9%) member contribution will be paid by the member, through pre-tax payroll deduction.

   3. All "new members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the City's Tier 3 plan; 2.7% at 57 for Sworn employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

   4. Employer paid member contributions shall be considered deferred income for federal and state income tax purposes. Should any state or federal agency alter the current income tax treatment of such payments, the consequences of such action shall be the sole responsibility of the affected employees, and shall in no way alter any obligation of the City toward such employees.

2. Retiree Health Plan

   A. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered by this Resolution.

   B. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

   C. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

   D. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

3. Health Insurance Benefits

   A. Indemnity Medical Insurance

      The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

   B. Indemnity Dental Insurance

      The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

   C. Health Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

D. Vision Care Plan

The City shall provide a vision care plan.

E. For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological and vision insurance shall not exceed $694.04 per month, per employee, $754.04 per month, per employee plus one (1) dependent or $1,064.31 per month per employee plus family. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections.

F. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in item F., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in item F. above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

4. Disability Insurance

The City shall provide a long-term disability insurance plan for employees.

5. Life Insurance

Employees covered by this Resolution shall be provided a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000.

6. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code Sections 125 and 129. The City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

7. Expense Allowances

A. Vehicle/Vehicle Allowance

Management employees listed in Sections A and B of Attachment I shall be provided a vehicle at City expense or a monthly vehicle allowance. Those classifications listed in Section C of Attachment I shall be provided a monthly vehicle allowance. The City Manager may approve use of a City vehicle or mileage reimbursement for those miles traveled in the employee's vehicle, which exceed the miles covered by the vehicle allowance based on the current mileage rate

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Classifications in Section A and B	$550
Classifications in Section C	$300

B. Telecommunications Allowance

Employees listed in Sections A, B and C of Attachment I shall be provided a $100.00 monthly allowance for cellular service. In addition, a reimbursement of up to $200 for cellular equipment will be provided upon receipt of invoice initially (following appointment to an affected classification) and once every two years thereafter, if necessary to replace existing equipment. All contracts for cellular service for these employees shall be between the provider and the individual.

8. Vacation

Management and Non-Represented employees shall accrue vacation credits on a monthly basis as follows:

Years of Service	Annual Vacation Credits
1 through 3	120 hours
After 3 through 10	160 hours
After 10 years or more	200 hours

As an incentive for filling critical management and non-represented positions, as part of an offer of employment, the City Manager may grant a vacation balance of one week upon appointment.

Employees may not accrue more than three (3) times their annual accrual rate of vacation. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The dates an employee may take her/his vacation shall be determined by the Department Director or the City Manager with due regard for the wishes of the employee and particular regard for the needs of the City. Other policies related to

the accrual and use of vacation shall be as provided in the Personnel Rules and Procedures.

9. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

10. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify her/his immediate supervisor or the Personnel Officer prior to or within one (1) hour after the time set for beginning her/his daily duties, or as may be specified by the head of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer, stating the cause of absence.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

11. Personal Sick Leave Conversion

Employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of 168 hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of 168 hours at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave hours to vacation hours.

Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Management Retiree Health Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the Retiree Health Savings Plan shall occur as follows:

A. The City will convert unused sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

B. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Upon separation regular full-time employees must convert all remaining sick leave hours into their respective individual accounts in the Retiree Health Savings Plan as follows:

1. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

2. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause shall not be eligible to convert their sick leave into the Retiree Health Savings Plan.

12. Personal Leave

Effective the pay period which includes January 1st of each year, employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

13. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year. The immediate family shall be defined as mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child**,** grandparent, grandparents in-law, grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

14. Parenthood Leave

An employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child by the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. . Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

15. Administrative Leave

Effective the first pay period beginning in January of each year, employees in classifications listed in Section A, B, C or D of Attachment I will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for management and non-represented employees appointed during the calendar year. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not accrue from year to year or be paid off upon termination. . This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 40 hours.

16. Education/ Reimbursement/Professional Development/Professional Advancement

Employees shall be eligible for reimbursement of approved education or professional development expenses to a maximum of $1,300 per calendar year.

Up to $500 of the employee's annual professional development fund may be used towards travel, expenses for City approved conferences, seminars, job-related training, and/or certified wellness programs for Sworn employees in accordance with Irvine Police Department and City Policy. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures.

Up to $250 of the employee's annual professional development funds may be used toward supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

The sworn employees listed in Attachment I shall be eligible for a twelve percent (12%) Professional Advancement benefit upon attaining a California P.O.S.T. Executive Development Certificate or completion of a FBI National Academy program or completion of a Master's Degree or comparable extended professional management training program.

17. Holidays

The recognized holidays to be observed by the City in each calendar year shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Full-time employees shall receive nine (9) hours pay for each holiday observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each holiday observed on a regularly scheduled working Friday. Regular full-time employees working an eight-hour (8), five-day (5) schedule will receive eight (8) hours for each of these holidays.

Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

18. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on

juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

19. Military Leave

Employees shall be entitled to such benefits as are provided by law. An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director or the City Manager prior to the beginning of the leave.

20. Physical Examination

The City shall reimburse employees in classifications listed in Sections A, B or C of Attachment I up to a maximum of $350 per calendar year for expenses incurred as a result of an annual physical examination as defined in Article 24 of the City's Personnel Rules and Procedures. The City shall reimburse employees in classifications listed in Section D of Attachment I up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination as defined in Article 24 of the City's Personnel Rules and Procedures. An annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

21. Industrial Accident Salary Continuance

In the event that it is determined that a full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

A. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

B. The employee shall accrue sick leave or vacation leave during the term of the Industrial Accident Salary Continuance taken;

C. The employee's condition is not permanent and stationary as determined by the City's appointed physician.

For sworn CalPERS members, the City shall follow the provisions of Section 4850 of the California Labor Code when that member is disabled by injury or illness arising out of and in the course of his/her duties.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

22. Accrual of Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

23. Select Benefits Program

The City will provide a cafeteria-style benefit program for Management and Non-Represented employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

B. Employees not claiming dependents on their health plan shall receive $150 per month. The stipend may be taken as taxable cash.

24. Management Incentive Pay

Management employees in the classifications listed in Sections A, B, and C of Attachment I, shall be eligible to receive 3% Management Incentive Pay above the base salary, in recognition for the unique nature of their work.

25. Bilingual Pay Program

Department Directors shall annually designate which positions will be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified

employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

SECTION 3. PAY PROGRESSION IN A PAY GRADE

1. Base Pay Progression

Pay progression within a Salary Grade will be based strictly upon individual performance and summarized in an annual performance appraisal. For employees listed in Sections B, C, and D of Attachment I, all base pay progression within pay grades will be limited to the Market Point of a pay grade according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards	3% base adjustment, limited to Maximum of pay grade

Less than Maximum Range	Excellent	4 ½% base adjustment, limited to Maximum of pay grade
Less than Maximum Range	Outstanding	6% base adjustment, up Maximum of pay grade

Annual merit increases will be effective the payroll period that includes September 1st of each year and will be prospective from that date.

2. Initial Six-Month Merit Reviews

Employees listed in Sections B, C and D of Attachment I who have completed less than six (6) months of service in their Management or Non-Represented classification effective June 30th of each year will not be eligible to participate in the annual review process. At the completion of the initial six months of service in their current classification, the employees in Sections B, C and D of Attachment I will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for six-month reviews will be the same as those for annual performance reviews.

Following the completion of six months of service in their current classifications, the employees in Sections B, C and D of Attachment I will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the initial six (6) month merit review will be prorated to reflect only the time period since the completion of the initial six months of service. All subsequent performance reviews will be according to the same merit schedule as other Management and Non-Represented employees.

SECTION 4. WAGE AND SALARY ADJUSTMENT

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

SECTION 5. MANAGEMENT SPECIALIST

Classifications listed in Section D of Attachment I shall be designated as “Management Specialists” pursuant to the City’s Personnel Rules and Procedures.

SECTION 6. SEVERANCE

In the event of a lay-off within a designated management classification, the City Manager shall be authorized to enter into a severance agreement with the impacted employee.

SECTION 7. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 8.

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

Attachment I

Executive Management, Management and
Non-Represented Employees (Exempt) Classification Titles

A. City Manager

B. Assistant City Manager
Assistant City Manager, Special Projects
City Clerk
Director of Administrative Services
Director of Community Development
Director of Community Services
Director of the Great Park
Director of Public Affairs and Communications
Director of Public Safety/Chief of Police
Director of Public Works
Director of Transportation
Deputy City Manager
Deputy Director, Administrative Services
Deputy Director, Community Services
Deputy Director, Public Works
Deputy Director, Public Safety/Police Chief
Deputy Director, Community Development
Special Assistant to the Chief of Police

C. Chief Information Officer
Council Services Manager
Manager, Advance Planning
Manager, Animal Care
Manager, Budget & Business Planning
Manager, Building & Safety/Chief Building Official
Manager, Business Services
Manager, Community Services
Manager, Engineering/City Engineer
Manager, Facility Maintenance and Rehabilitation
Manager, Fiscal Services
Manager, Great Park Planning & Development
Manager, Housing
Manager, Human Resources
Manager, Land & Assets
Manager, Neighborhood Services
Manager, Orange County Great Park Corporation
Manager, Public Communications
Manager, Public Services
Manager, Transit and Transportation

D. Chief Veterinarian
Animal Care Center Veterinarian

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine has established a classification and compensation policy for part-time employees.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. CLASSIFICATION AND PAY STRUCTURE

Part-time classification titles shall be set forth in Attachment I effective August 13, 2015. The minimum and maximum hourly rates for part-time classifications shall be as set forth in the Annual Salary Resolution for all City Employees. Part-time positions with full-time classification titles shall have minimum hourly rates which are the hourly equivalent to the minimum of the salary range for the corresponding full-time classification; the maximum hourly rate for part-time positions with full-time classification titles included in the ICEA unit shall be the hourly equivalent to thirty-eight percent (38%) above the range minimum of the salary range for the corresponding full-time classification; the maximum hourly rate for all other part-time positions with full-time classification titles shall be the hourly equivalent to thirty-seven and a half percent (37.5%) above the range minimum of the salary range for the corresponding full-time classification.

Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

SECTION 2. PERFORMANCE REVIEW SYSTEM FOR PART-TIME EMPLOYEES

Part-time employees, except for Council Executive Assistants and Crossing Guards, will receive performance reviews and merit adjustments at six (6) months and annually thereafter. Recommended merit adjustments must be based upon written performance evaluations. The following performance rating categories will be used.

For fiscal year 2013-14, merit increases will be effective the pay period that includes September 1, 2013.

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Needs Improvement	0%
Less than Maximum	Successful	5% base adjustment, limited to maximum of pay grade
Less than Maximum	Excellent	5% base adjustment, limited to maximum of pay grade
Less than Maximum	Outstanding	5% base adjustment, limited to maximum

SECTION 3. RETIREMENT PLAN

In accordance with the Social Security Act, 26 U.S.C. § 3121(b)(7)(f), part-time employees will be eligible to participate in a qualified retirement plan of the City's choice.

1. 2003 Implementation of CalPERS Option in the City of Irvine (Applicable to part-time employees hired prior to June 30, 2003)

A. PARS I: All part-time employees designated as Regular Part-time and Extended Part-time who work 1,000 hours or more per fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis, and who elected to decline the CalPERS benefits shall be enrolled in the PARS I plan.

1. The PARS I retirement plan shall be provided through participation in the Public Agency Retirement Systems Trust. The plan is in compliance with the Omnibus Reconciliation Act of 1990.
2. Once a member of the PARS I plan, such participation shall continue until the employee terminates employment with the City for any reason.

3. Contribution Rates:
   i. The following employee and employer contribution formulas shall be in effect for the PARS I plan:
   Employee Contribution: 4.3%
   Employer Contribution: 3.2%

B. CalPERS: For all part-time employees designated as Regular Part-time and Extended Part-time who work 1,000 hours or more per fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis, who

elected to waive their rights to the Public Agency Retirement Systems Trust (PARS I) and who elected to transfer to the CalPERS program:

1. The City's contract with CalPERS shall include the following options:
   i. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   ii. One Year Final Compensation (Cal. Govt. Code Section 20042)
   iii. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost
   iv. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
   v. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
   vi. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)
   vii. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).
   viii. All eligible part-time employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the PARS I plan referenced in Section 3.1.A.
   ix. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

C. PARS II: All part-time employees who were not eligible to enroll in the CalPERS or PARS I plan were enrolled into the City's PARS II Plan.

2. Ongoing Retirement Plan Eligibility (Applicable to part-time employees hired July 1, 2003 and after)

A. PARS II: Part-time employees hired on or after July 1, 2003 who do not qualify for CalPERS membership (are not members of CalPERS from previous employment and or do not work 1,000 hours or more in a fiscal year or an average of 20 hours per week on a regular fiscal year-round basis) shall be enrolled by the City in the Public Agency Retirement Services (PARS II) plan.
   1. Participation in the PARS II plan shall continue until the employee terminates employment or becomes a CalPERS eligible part-time employee for any reason.
   2. Contribution Rates:
      i. The following employee and employer contribution formulas shall be in effect for the PARS II plan:
         Employee Contribution: 4.3%
         Employer Contribution: 3.2%

B. CalPERS:

1. Eligible Employees: All eligible part-time employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program. Eligible employees include:
   i. Employees appointed to an Extended Part-time position.
   ii. Part-time employees who work 1,000 hours or more in a fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis.
   iii. Part-time employees who are members of CalPERS based on previous employment.
   iv. CalPERS member employees who separate from the City of Irvine and then return to work in the City in a PERS eligible position will be enrolled in their original PERS tier.

2. Contribution Rates:
   i. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.
   ii. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for new hires. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.
   iii. Effective January 1, 2013 all "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City will become members of the City's Tier 3 plan; 2% at 62 retirement program with highest average annual pensionable compensation earned during a period of at least 36 consecutive months.
   iv. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

C. Retired Annuitants: Retired annuitants are CalPERS retirees who work part–time and are limited to working 960 or fewer hours in a fiscal year. As retired members of CalPERS, these employees are considered to be participants of a qualified retirement plan and therefore will not be enrolled by the City in any additional retirement plan limited to the guidelines set forth by CalPERS.

SECTION 4. DESIGNATION OF PART-TIME EMPLOYEES

All references to regular part-time employees in this Resolution shall be defined as regular part-time employees who were hired before May 8, 1997 and who retained the designation of a regular employee within the competitive service. All other part-time

employees shall be “at-will” and serve at the pleasure of the appointing authority. Part-time employees appointed to assignments which require a minimum of thirty (30) hours of work per week on a permanent year-round basis shall be called “extended” part-time employees for the purposes of this Resolution.

Regular part-time employees and extended part-time employees will be eligible to receive compensation benefits as identified in SECTION 5 of this Resolution. All part-time employees shall be eligible to receive additional compensation benefits as identified in SECTION 6 of this Resolution.

Council Executive Assistants shall be classified as part-time employees and subject to the provisions of the Resolution of the City Council of the City of Irvine Establishing Administrative Policies and Procedures for Council Executive Assistants. Council Executive Assistants that consistently work an average of 30 hours shall be eligible to receive benefits consistent with EPT benefits.

Crossing Guards are compensated on a daily stipend basis and are not eligible for vacation or holiday benefits. Crossing Guards are paid only for days worked and earn the full daily stipend amount for completing a full daily work shift or half the daily stipend for completing only half of the daily work shift. Crossing Guards hired prior to 1996 shall be paid at the Tier II stipend rate. All other Crossing Guards shall be paid at the Tier I stipend rate. Crossing Guards are eligible to participate in the PARS retirement plan in accordance to Section 3 of this Resolution, in the Medical Insurance program in accordance with Section 5.1. of this Resolution and receive paid sick leave benefits in accordance to Section 5.4 of this Resolution.

SECTION 5. COMPENSATION COMPONENTS FOR REGULAR AND EXTENDED PART-TIME PERSONNEL

Regular part-time employees and extended part-time employees shall receive additional compensation benefits as follows:

1. Medical Insurance:

   A. Health Insurance:

   The City shall provide the option to employees to enroll in an indemnity medical insurance plan or Health Maintenance Organization (HMO).

   B. The total cost to the City for medical insurance coverage for employee only shall not exceed 50% of the monthly premium.

   C. The City shall provide the option to employees, who have enrolled in the HMO plan, to purchase HMO medical insurance for their dependents. The total cost of the additional premium shall be borne by the employee.

D. The City shall provide the option to employees to enroll in a dental Health Maintenance Organization for employees only. The total cost shall be borne by the employee.

2. Vacation:

Regular part-time employees and all other extended part-time employees shall accrue vacation benefits on an annual basis as follows:

Years of Service	Annual Vacation Credits
1 through 3	60 hours
after 3 through 10	90 hours
after 10 years or more	120 hours

Employees may not accrue more than forty (40) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The time during a calendar year at which an employee may take her/his vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays, if normally scheduled to work, shall not be charged as vacation leave, but rather as holidays.

Regular part-time employees and extended part-time employees who terminate employment shall be paid in a lump sum for all accrued, but not used, vacation leave earned prior to the effective date of termination.

3. Vacation Buyback:

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to twenty (20) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

4. Paid Sick Leave:

a. Regular part-time employees and all other extended part-time employees shall accrue paid sick leave credits at the rate of six (6) hours per month (2.77 hours per pay period).
b. Part-Time employees and crossing guards who qualify for paid sick leave under AB 1522 shall receive paid sick leave annually in the pay period that includes July 1. Retired annuitants are not eligible to receive paid sick leave benefits under AB 1522. Eligible employees may begin using paid sick leave after 90 days of employment with the City.

    i. Eligible part-time employees shall receive 24 hours of paid sick leave annually. Part-Time employees hired after July 1, will receive a prorated amount of two hours per month. A part-time employee who uses paid sick leave must use a minimum of two hours.
    ii. Crossing guards shall receive the equivalent of three (3) shifts of paid sick leave annually. Crossing guards who are hired after July 1, will receive a prorated amount of one shift for every four months. A crossing guard who uses paid sick leave must use a minimum of one half a stipend.
    iii. Paid sick leave will not be considered hours worked for purposes of overtime calculation. Employees will not receive compensation for unused accrued paid sick leave upon termination, resignation, retirement or other separation from employment from the City.
    iv. If an employee separates from the City and is rehired within one year of the date of separation, previously accrued and unused paid sick leave hours shall be reinstated to the extent required by law. However, if a rehired employee had not met the requisite 90 days of employment to use paid sick leave at the time of separation, the employee must still satisfy the 90 days of employment requirement prior to using paid sick leave.

c. In accordance with California's Paid Sick Leave law, an employee may use accrued paid sick leave for one of the following reasons:

    i. For the employee's own diagnosis, care, or treatment of an existing health condition or preventative care.
    ii. For the diagnosis, care, or treatment of an existing health condition or preventative care for an employee's family member, including: Child (including a biological, adopted, or foster child, stepchild, legal ward, or a child to whom the employee stands in loco parentis.), spouse or Registered Domestic Partner, parent (including biological, adoptive, or foster parent, stepparent, or legal guardian of an employee or the employee's spouse or registered domestic partner, or a person who stood in loco parentis when the employee was a minor child.), grandparent, grandchild or sibling.
    iii. To obtain any relief or services related to being a victim of domestic violence, sexual assault, or stalking including the following with appropriate certification of the need for such services: A temporary restraining order or restraining order, other injunctive relief to help ensure the health, safety or welfare of themselves or their children, to seek medical attention for injuries caused by domestic violence, sexual assault, or stalking, to obtain

services from a domestic violence shelter, program, or rape crisis center as a result of domestic violence, sexual assault, or stalking, to obtain psychological counseling related to an experience of domestic violence, sexual assault, or stalking, to participate in safety planning and take other actions to increase safety from future domestic violence, sexual assault, or stalking, including temporary or permanent relocation.

An employee shall provide reasonable advance notification of their need to use accrued paid sick leave to their supervisor if the need for paid sick leave use is foreseeable (*e.g.,* doctor's appointment scheduled in advance). If the need for paid sick leave use is unforeseeable, the employee shall provide notice of the need for the leave to his/her supervisor with one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the head of his/her department.

An employee receiving temporary disability payments while in the Workers' Compensation Program may use a pro-rated amount of accumulated leaves to supplement temporary disability payments in order to continue to maintain her/his regular income. Employees must use their accrued sick leave (until this sick leave is exhausted) prior to use of other leaves. Under circumstances in which an employee receives benefits over and above his/her regular income, the employees shall submit the excess amount to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

5. Holidays:

The holidays to be observed by the City shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Employees, who are assigned to a 7-day work schedule, as designated by their department, shall observe holidays on the same days as employees who are not assigned to a 7-day work schedule with the following exceptions;

New Year's Day
Independence Day (4th of July)
Christmas Eve
Christmas Day

In this case, employees shall observe the holiday on the actual day of the holiday.

Regular part-time employees and extended part-time employees shall receive up to nine (9) hours of pay for normally scheduled working hours which fall on official City holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive up to eight (8) hours of pay for normally scheduled working hours which fall on official City holidays observed on a Friday. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Regular part-time employees and extended part-time employees assigned to work on authorized holidays shall receive regular paid holiday compensation and compensation for actual hours worked.

Holiday Leave

Effective in December 2017 and each year thereafter, extended part-time employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Extended part-time employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

6. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that regular part-time and extended part-time employees of the City are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

SECTION 6. COMPENSATION COMPONENTS APPLICABLE TO ALL PART-TIME PERSONNEL

1. Overtime Compensation:

   Hours worked in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at one and one-half time (1-1/2) the employee's hourly rate when authorized by the Department Director and approved by the City Manager. Part-time employees may not accrue any form of compensatory time-off.

2. Bilingual Pay:

   A. Department Directors shall annually designate which positions are assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $11.54 per pay period. For pay periods where the employee does not receive a paycheck, no bilingual pay will be paid.

   B. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

   C. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

   D. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $25.00 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period in which he/she is not receiving the bilingual pay stipend.

   E. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the

order of rotation among the qualified employees. An employee, who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

3. Class B Certification Stipend

A. Employees who are assigned to an eligible assignment and who possess a California Class B Driver's License shall receive an additional $16.15 per pay period. For pay periods where the employee does not receive a paycheck, no Class B Stipend will be paid.

B. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for the Class B Certification Stipend, depending on the frequency and regularity of duties that require a California Class B Driver License.

4. Compensation for Employees Assigned to Care for Animals at Home

Employees covered herein who are assigned to care for animals in their home are entitled to compensation for the off-duty hours spent caring, grooming and feeding their animal. The parties acknowledge that the Fair Labor Standards Act, which governs the entitlement to compensation for off duty caring, grooming and feeding of animals, entitles the parties to agree to a reasonable number of hours per week or per month for the performance of such duties. It is the intent of the parties through the provisions of this agreement to fully comply with the requirements of the Fair Labor Standards Act. In addition, both parties believe that this agreement does comply with the requirements of the Fair Labor Standards Act, including, but not limited to Department of Labor regulation 29 CFR section 785.23.

Employees assigned as animal caregivers at home shall be paid $7.25 per hour for such duties and are not permitted to work more than two (2) hours per week on such duties. The $7.25 is intended to comply with the federal minimum wage per the FLSA. If that wage increases, the compensation for such duties will increase to match the federal minimum wage. Since such hours are in addition an employees' regular work hours, if such employees exceed the overtime threshold for the week by the performance of the off-duty animal caregiver duties, employees will be paid at 1.5 times the $7.25 per hour rate, i.e., $10.875 (up to a maximum of two hours per week) for such duties for a total weekly amount of $21.75.

A. Only Community Services employees who are regularly assigned to the Irvine Animal Care Center are eligible for this compensation;
B. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for this compensation, depending on the frequency and regularity of these duties.

SECTION 7. ADMINISTRATION OF COMPENSATION POLICY

The Personnel Officer shall establish procedures for the efficient administration of the compensation policy described in this Resolution.

The City Manager shall approve procedures for movement of an individual employee through salary ranges. Such procedures shall be reviewed annually. All adjustments to the salary ranges shall be approved by the City Council.

SECTION 8. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 9. EFFECTIVE DATE

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on September 12, 2017, unless otherwise stated. All previous Resolutions are hereby repealed effective on the operative date of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT I

PART-TIME CLASSIFICATION TITLES

Animal Care Attendant
Animal Care Specialist
Animal Services Officer
Assistant Food Service Manager
Catering Coordinator
Community Services Leader I
Community Services Leader II
Community Services Leader III
Community Services Senior Leader
Council Executive Assistant I
Council Executive Assistant II
Council Executive Assistant III
Council Executive Assistant IV
Crossing Guard
Department Aide
Equipment Service Worker
GIS Technician
Graphic Designer
Information Systems Specialist
Intern I
Intern II
Kitchen Assistant I
Kitchen Assistant II
Lead Cook
Lifeguard
Office Assistant I
Office Assistant II
Office Assistant III
Outreach Assistant I
Outreach Assistant II
Pool Manager
Public Information Assistant
Public Safety Aide
Registered Veterinary Technician Specialist
Reservations Specialist I
Reservations Specialist II
Reservations Specialist III
Senior Council Executive Assistant
Senior Graphics Designer
Swim Instructor/Lifeguard
Veterinary Assistant
Zoning Administrator

4.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: MINUTES

City Clerk

RECOMMENDED ACTION:

Approve the minutes of a regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency held on August 8, 2017.

MINUTES

CITY COUNCIL
REGULAR MEETING
AND
REGULAR JOINT MEETING
WITH THE CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

August 8, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

The regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency was called to order at 4:05 p.m. on August 8, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor/Chairman Wagner presiding.

ROLL CALL

Present:	4	Councilmember/Boardmember:	Melissa Fox
		Councilmember/Boardmember:	Christina Shea
		Mayor Pro Tempore/Vice Chairwoman:	Lynn Schott
		Mayor/Chairman:	Donald P. Wagner
Absent:	1	Councilmember/Boardmember:	Jeffrey Lalloway

1. CLOSED SESSION

City Attorney Melching announced the following Closed Session item:

1.1 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Deputy City Manager; Jimmee Medina, Deputy Director of Administrative Services; Brian King, Manager of Human Resources; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees

RECESS

Mayor Wagner convened the regular City Council meeting to Closed Session at 4:07 p.m.

RECONVENE TO THE CITY COUNCIL MEETING

Mayor Wagner reconvened the regular City Council meeting at 5:08 p.m. City Attorney Melching, on behalf of the City Council, announced that no reportable action was taken in Closed Session.

PLEDGE OF ALLEGIANCE

Mayor Pro Tempore Schott led the Pledge of Allegiance.

INVOCATION

Pastor Frank Winans from Woodbridge Community Church in Irvine provided the invocation.

CITY MANAGER'S REPORT

City Manager Joyce announced the upcoming retirement of Susan Emery, Director of Community Development, and Michael LeBlanc, Senior Vice President with the Irvine Company, and wished them both well in their future endeavors; and turned to Mike Hamel, Director of Public Safety/Chief of Police, who spoke about the recent National Night Out event and the department's new Mounted Unit.

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Councilmember Fox reiterated the success of the recent National Night Out event; and announced that the Association of California Cities was requesting ideas for legislation to improve businesses in cities and finding ways to prevent unnecessary regulations.

Mayor Wagner made the following announcements:

- On Saturday, August 5, the grand opening of the first phase of the Orange County Great Park Sports Park took place, which featured youth and professional athletes and ended with a concert by the Blues Brothers. The Sports Park was a result of a public-private partnership with FivePoint Communities. Amenities include six soccer fields, the Soccer Stadium, five sand volleyball courts, 25 tennis courts, and a children's play area. To learn more, call 949-724-6584 or visit *ocgp.org*.

- For the third consecutive year, the Irvine Animal Care Center is joining a nationwide effort to "Clear the Shelters". At the August 19 event, sponsored in Southern California by NBC-4 and Telemundo-52, all pet adoptions will be $20. The Irvine Animal Care Center, located at 6443 Oak Canyon Road, is open from 10 a.m. to 6 p.m. the day of the event. For information, visit *cityofirvine.org/animals.*

- The 2017 Irvine Senior Fitness Expo will take place on Friday, August 25 at the Rancho Senior Center from 9 a.m. to noon, which features exercise and fitness demonstrations, free health screenings, nutrition presentations and more. For information, call 949-724-6800 or visit *cityofirvine.org/seniors.*

- Irvine has been named the "8th Safest City in America to Raise a Child" by Safewise, a home safety website, with Irvine the only California city to make the list. The report citied bikeways, parks and open space, higher education opportunities, and FOR Families, which provides resources and short-term support to Irvine residents struggling with life's challenges. The ranking looked at cities in the United States with more than 10,000 residents, taking into account reported sex offender concentration, state graduation rates, overall school quality ranking, and FBI violent crime data. It also considered parks and recreational opportunities as well as special programs focused on providing services for kids and families.

ADDITIONS AND DELETIONS

There were no additions or deletions to the agenda.

CONVENE TO THE REGULAR JOINT MEETING

Mayor/Chairman Wagner convened to the regular Joint Meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 5:26 p.m.

2. CONSENT CALENDAR - CITY COUNCIL

ACTION: Moved by Councilmember/Boardmember Shea, seconded by Councilmember/Boardmember Fox, and unanimously carried by those members present (Councilmember/Boardmember Lalloway absent) to approve City Council Consent Calendar Item Nos. 2.1 through 2.11, and Successor Agency Consent Calendar Item Nos. 3.1 through 3.3, with the exception of City Council Consent Calendar Item No. 2.7, which was removed for separate discussion.

2.1 MINUTES

ACTION:
Approved the minutes of a regular meeting of the Irvine City Council held on July 25, 2017.

2.2 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:
Adopted RESOLUTION NO. 17-52 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

2.3 DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION PLAN AUDITS FOR THE YEAR ENDED DECEMBER 31, 2016

ACTION:
Received and filed the Defined Benefit and the Defined Contribution Pension Plan audits for the year ended December 31, 2016.

2.4 AMENDMENT FOR LEGAL ENTITY NAME CHANGE TO THE OUTSOURCED INFORMATION TECHNOLOGY SERVICES CONTRACT

ACTION:
Approved the First Amendment to the Outsourced Information Technology Services contract changing the legal entity to Enterprise Services, LLC from HP Enterprise Services, LLC. **(Contract No. 9562A)**

2.5 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:
Adopted RESOLUTION NO. 17-53 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51 **(Contract No. 6896A)**

2.6 ACCEPTANCE OF AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR REIMBURSEMENT OF TRAINING COSTS FOR FISCAL YEAR 2016 URBAN AREAS SECURITY INITIATIVE GRANT

ACTION:
1) Authorized the Director of Public Safety to accept the Agreement for Transfer or Purchase of Equipment/Supplies or for Reimbursement of Training Costs for Fiscal Year 2016 Urban Areas Security Initiative Grant. **(Contract No. 9925)**
2) Authorized the Director of Public Safety to accept equipment, technology, services or supplies purchased by the City of Anaheim and transferred to the City of Irvine to enhance countywide emergency preparedness.
3) Approved a budget adjustment request in the amount of $50,000 in grant revenues and appropriations for training costs and necessary personnel; as well as equipment, supplies or services.
4) Authorized the Director of Public Safety to submit for reimbursement up to $25,000 in training and personnel costs, and $25,000 in approved equipment, supplies or services through the Fiscal Year 2016 Urban Areas Security Initiative Grant.

2.7 ACCEPTANCE OF MARUCHAN, INCORPORATED DONATION

This item was removed for separate discussion at the request of Mayor Pro Tempore Schott, expressed her appreciation to Maruchan for its numerous donations in prior years and its recognition of the value of public safety in our community.

There was no additional discussion.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Shea, and unanimously carried by those members present (Councilmember Lalloway absent), to:

Accept a $100,000 donation from Maruchan, Incorporated.

2.8 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR ORANGE COUNTY GREAT PARK SOUTH LAWN PUMP STATION ENCLOSURE

ACTION:

1) Approved the construction plans, specifications and contract documents for the Orange County Great Park, South Lawn Pump Station Enclosure, Capital Improvement Project 381703.
2) Approved the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorized staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved budget.

2.9 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR OPERATIONS SUPPORT FACILITY ACCESSIBILITY IMPROVEMENTS

ACTION:

1) Approved the construction plans, specifications and contract documents for the Operations Support Facility Accessibility Improvements, Capital Improvement Project 361602.
2) Approved the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorized staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

2.10 NOTICE OF PENDING APPROVAL FOR TRACT MAPS IN ORCHARD HILLS, LOS OLIVOS AND PORTOLA SPRINGS

ACTION:
Received and filed.

2.11 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

1) Approved Mayor Pro Tempore Schott's requests for Community Partnership Fund Grant nominations to the Irvine Korean Evergreen Association in the amount of $1,000 **(Contract No. 9926)**, and the Irvine Barclay Theatre in the amount of $2,000 **(Contract No. 9927)**, in support of program costs; and New Outlook Center in the amount of $2,000 **(Contract No. 9902)** in support of its mission and goals.
2) Authorized the City Manager to prepare and sign the funding agreements listed in Action 1.

3. CONSENT CALENDAR - SUCCESSOR AGENCY

3.1 MINUTES

ACTION:

1) Approved the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on March 28, 2017.
2) Approved the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on July 11, 2017.

3.2 WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ACTION:
Adopted RESOLUTION NO. 17-03 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

3.3 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:
Adopted RESOLUTION NO. 17-04 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51 **(Contract No. 6896A)**

PUBLIC COMMENT - SUCCESSOR AGENCY

There were no public comments.

ADJOURNMENT - REGULAR JOINT MEETING

Moved by Mayor Pro Tempore/Vice Chairwoman Schott, seconded by Councilmember/Boardmember Shea, and unanimously carried by those members present (Councilmember/Boardmember Lalloway absent), to adjourn the regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 5:28 p.m.

RECONVENE TO THE CITY COUNCIL MEETING

Mayor Wagner reconvened the regular City Council meeting at 5:29 p.m.

4. PUBLIC HEARINGS

4.1 ZONE CHANGE TO AMEND IRVINE'S SIGN CODE TO ALLOW OFF-PREMISES ADVERTISING ON THE EXISTING ELECTRONIC FREEWAY SIGN LOCATED IN THE IRVINE AUTO CENTER AT 30 AUTO CENTER DRIVE IN PLANNING AREA 35 (IRVINE SPECTRUM 2)

Mayor Wagner opened the public hearing at 5:30 p.m. There were no requests to speak.

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Councilmember Lalloway absent) to:

Continue the public hearing to September 26, 2017.

5. COUNCIL BUSINESS

5.1 BOND ISSUANCE FOR REASSESSMENT DISTRICT NO. 05-21

Jennifer King, Finance Administrator, presented the staff report and responded to questions.

City Council discussion included: clarification of the approved level of assessments and bond amounts; inquired about prior ceiling amounts; questioned whether funding could be used in other ways, such as additional infrastructure; and inquired about potential impacts to homeowners.

Michael Langford, representing the Irvine Company, provided clarification of the proposed bond issuance.

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Councilmember Lalloway absent), to:

ACTION:
Adopt RESOLUTION NO. 17-54 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING THE ISSUANCE AND SALE OF NOT TO EXCEED $19,500,000 AGGREGATE PRINCIPAL AMOUNT OF CITY OF IRVINE REASSESSMENT DISTRICT NO. 05-21 LIMITED OBLIGATION IMPROVEMENT BONDS, FIXED RATE SERIES, GROUP THREE, APPROVING THE EXECUTION AND DELIVERY OF A THIRD SUPPLEMENTAL INDENTURE AND A BOND PURCHASE AGREEMENT

5.2 A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

Manuel Gomez, Director of Public Works, and Mike Byrne, Senior Management Analyst, presented the staff report and responded to questions.

The following individuals spoke in opposition to the proposed revisions to service areas within the Nonexclusive Franchise Agreement:

Jeff Snow, representing Rainbow/Republic Services
Ron Saldana, representing California Waste and Recycling Association

Chip Monaco, representing Waste Management, spoke in support of the proposed revisions.

City Council discussion included: ensuring fairness and preventing any unfair burden to all interested stakeholders; questioned potential impacts to environmental sustainability; noted the approximate percentage of Orange County cities that are exclusive to one provider for waste hauler services; noted a preference to maintain the current program of open competition; reiterated Waste Management's guarantee of lowest rates in Orange County for Irvine residents; questioned the differential between Waste Management's prior and existing exclusive service area; expressed concern about the terms of cancellation in the proposed agreement; noted that non-exclusive waste haulers had not been provided sufficient time to address concerns; expressed concern about additional pollution from waste hauling vehicles in the Portola Springs area and a requirement to convert to clean air vehicles by January 2019; questioned the designation of the Los Olivos Shopping Center and inquired about how commercial and neighborhood shopping centers were distinguished from one another; suggested more frequent review of the non-exclusive service areas to determine how shopping centers were operating; and noted concurrence with agendizing the item for review by the Finance Commission.

Director of Public Works Gomez noted that only three cities in Orange County, including Irvine, were open to competition; that the changes in the proposed service areas were not based on a "like for like" exchange, but rather, on revenue generation; and noted a preference to align the terms of the non-exclusive franchise agreement with the exclusive franchise agreement.

Sean Joyce, City Manager, noted that newly built residential areas were assigned to Waste Management consistent with past practice.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Shea, to:

Adopt RESOLUTION NO. 17-55 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

The motion carried as follows:

AYES:	3	COUNCILMEMBERS:	Schott, Shea and Wagner
NOES:	1	COUNCILMEMBERS:	Fox
ABSENT:	1	COUNCILMEMBERS:	Lalloway

5.3 ORDINANCE TO ESTABLISH CHANGES AND ADDITIONS TO POSTED SPEED LIMITS

Tran Tran, Senior Transportation Engineer, and Matt August, Police Sergeant, presented the staff report and responded to questions.

City Council discussion included: noting concerns raised about speeding and other moving violations in Woodbury, how speeds were determined in that village, and suggested a traffic study be conducted on Vintage Street to potentially reduce the speed limit to 25 mph; expressed concern about increasing speed limits on the Northwood Loop; noted a preference of not increasing speed limits in residential areas; inquired about police officers issuing citations using electronic surveillance; suggested revisiting increases in speed limits on certain streets if problems occur; enhancing signage to ensure speed limits are adhered to; suggested more frequent traffic studies from five years to two; and questioned potential solutions to maintain or enhance mobility in conjunction with appropriate speed limits.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Shea, to:

1) Introduce for first reading, and read by title only – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS **as amended** to not approve speed increases to the following roadway segments:

Roadway Segment	Location (Village)
Stone Creek S – West Yale Loop to Stone Creek N	Woodbridge
Northwood – Eastwood to Westwood	Northwood
Southwood – Eastwood to Westwood	Northwood
Eastwood – Northwood to Southwood	Northwood
Westwood – Northwood to Southwood	Northwood

2) Direct staff to reduce the timeframe in the reevaluation of speed studies from five to two years.

City Manager Joyce expressed concern that conducting speed studies every two years would require a significant undertaking.

Manuel Gomez, Director of Public Works, and Mark Linsenmeyer, Director of Transportation, noted that staff would work collaboratively with the Traffic Commission to determine which street segments should be evaluated on a more frequent basis.

Following discussion, Mayor Pro Tempore Schott amended her motion.

ACTION: An amendment to the main motion was moved by Mayor Pro Tempore Schott, accepted by Councilmember Shea as the seconder, and unanimously carried by those members present (Councilmember Lalloway absent), to

Introduce for first reading, and read by title only – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL

DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS **as amended** to not approve speed increases to the following roadway segments:

Roadway Segment	Location (Village)
Stone Creek S – West Yale Loop to Stone Creek N	Woodbridge
Northwood – Eastwood to Westwood	Northwood
Southwood – Eastwood to Westwood	Northwood
Eastwood – Northwood to Southwood	Northwood
Westwood – Northwood to Southwood	Northwood

5.4 CONSIDERATION OF MEMORANDUM OF UNDERSTANDING WITH PRETEND CITY CHILDREN'S MUSEUM FOR PROPERTY AT THE CULTURAL TERRACE

Pete Carmichael, Director, Orange County Great Park, and Allison LeMoine-Bui, legal counsel, Rutan & Tucker, presented the staff report and responded to questions.

The following individuals spoke in support of a memorandum of understanding with Pretend City Children's Museum for property at the Cultural Terrace:

Sandra Bolton
Daniel Campos
Sandra Peffer Stone

City Council discussion included: reiterating the need to move expeditiously with a memorandum of understanding (MOU); noted that the MOU did not specify a location or square footage; suggested taking a more comprehensive versus a piecemeal approach to planning the Cultural Terrace, and noted the need for a more comprehensive plan with the assistance of a consultant to evaluate fit, economics, and acreage; requested ample time to evaluate Pretend City's Business Plan; referenced discussion by the Great Park Board at its April 24, 2015 workshop and questioned whether any actions taken were binding; reiterated Pretend City's history with the City; noted that an MOU was a gesture of good faith; noted a similar request for property by U.S. Water Polo and reiterated that a potential venue for a water polo facility was not limited to the Cultural Terrace; questioned timeline requirements for Pretend City to enter into an MOU; suggested Board discussion regarding the planning of the Cultural Terrace be moved up from October to

September if possible; and expressed concern that Pretend City could lose funding if an MOU was not approved.

City Manager Joyce commented on the project priorities at the April 24, 2015 Workshop that reflected aspirations for the Cultural Terrace.

Director Carmichael noted the purpose of the Cultural Terrace study was to address urban design and implementation, and that staff would work with consultants to determine if the study could be completed in time for the Orange County Great Park Board meeting in September.

ACTION: Moved by Councilmember Shea, seconded by Councilmember Fox, to:

> Approve a Memorandum of Understanding with Pretend City Children's Museum for lease of property at the Great Park Cultural Terrace.

The motion failed as follows:

AYES:	2	COUNCILMEMBERS:	Fox and Shea
NOES:	2	COUNCILMEMBERS:	Schott and Wagner
ABSENT:	1	COUNCILMEMBERS:	Lalloway

5.5 DESIGNATION OF VOTING DELEGATE FOR LEAGUE OF CALIFORNIA CITIES 2017 ANNUAL CONFERENCE

Molly McLaughlin, City Clerk, presented the staff report.

City Manager Joyce noted that Councilmember Fox had expressed interest in attending the Annual Conference, to which Councilmember Shea offered to serve as alternate, schedule permitting, should Councilmember Fox be unable to attend.

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Councilmember Lalloway absent), to:

> Appoint Councilmember Fox to serve as the voting delegate, and Councilmember Shea to serve as the alternate, for the Annual Business Meeting at the League of California Cities 2017 Annual Conference.

PUBLIC COMMENT-CITY COUNCIL

Stephen Wontrobski, Mission Viejo resident, spoke in in opposition to the Orange County Fire Authority overcharging the City of Irvine for fire related services.

Ilya and Robert Tseglin reiterated a domestic issue related to an autistic family member.

Paul Marshall expressed concerns related to homeowner associations, citizens who face housing challenges, and communication issues between men and women.

ADJOURNMENT-CITY COUNCIL

Moved by Councilmember Fox, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Councilmember Lalloway absent) to adjourn the regular City Council meeting at 8:13 p.m.

_____
MAYOR OF THE CITY OF IRVINE

_____ September 12, 2017
CITY CLERK OF THE CITY OF IRVINE

4.2

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: PROCLAMATIONS/COMMENDATIONS

City Clerk

RECOMMENDED ACTION:

Proclaim the following:

1) September 17-23, 2017 as "National Forensic Science Week."
2) September 2017 as "Childhood Cancer Awareness Month."
3) September 2017 as "Prostate Cancer Awareness Month."
4) September 2017 as "World Alzheimer's Awareness Month."

Ratify the following:

5) Proclaim September 17-23 as "Constitution Week."
6) Commend California State University, Fullerton on its 60th Anniversary.
7) Commend Public Broadcasting Service of Southern California on its 45th Anniversary.
8) Commend United Service Organizations on its 76th Anniversary.

CITY OF IRVINE

Proclamation

NATIONAL FORENSIC SCIENCE WEEK
SEPTEMBER 17-23, 2017

WHEREAS, forensic science plays a vital role in law enforcement and numerous professional organizations each year recognize National Forensic Science Week; and

WHEREAS, in 2016 the men and women of Irvine Police Department Crime Scene Investigations Unit responded to approximately 3,000 calls for service and processed 2,000 items such as weapons, burglary tools and stolen property to collect and preserve important DNA an finger print evidence; and

WHEREAS, access to quality forensic analysis dramatically improves the investigation of criminal activity, leading to the exoneration of the innocent and the prosecution of the guilty; and

WHEREAS, forensic science plays a critical role in public outreach and crime prevention, and is evolving in its role as an important member of the criminal justice community; and

WHEREAS, crime scene investigators, forensic examiners, and forensic scientists provide unbiased, accurate, and reliable analyses of evidence recovered from across the nation.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM September 17-23, 2017 as NATIONAL FORENSIC SCIENCE WEEK,** and asks all residents to join in expressing their sincere appreciation for the outstanding service performed by crime scene investigators, forensic examiners, and forensic scientists throughout the year to process evidence.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Proclamation

CHILDHOOD CANCER AWARENESS MONTH
SEPTEMBER 2017

WHEREAS, the American Cancer Fund for Children and Kids Cancer Connection, through their collaboration, has reported that cancer is the leading cause of death by disease among children in the United States, with this tragic disease detected in more than 16,000 of our nation's young people each and every year; and

WHEREAS, one in five of our nation's children loses his or her battle with cancer with many infants, children and teens suffering from long-term effects of comprehensive treatment, including secondary cancers; and

WHEREAS, the American Cancer Fund for Children and Kids Cancer Connection provides a variety of vital patient psychosocial services to children undergoing cancer treatment at Children's Hospital Orange County, CHOC Children's at Mission Hospital, Miller Children's and Women's Hospital Long Beach, as well as participating hospitals throughout the country, thereby enhancing the quality of life for these children and their families; and

WHEREAS, the American Cancer Fund for Children and Kids Cancer Connection also sponsor the Courageous Kid Recognition Awards, family sailing, community get well cards, and hospital celebrations in honor of a child's determination and bravery to fight the battle against childhood cancer.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM SEPTEMBER 2017 as "CHILDHOOD CANCER AWARENESS MONTH"** in the City of Irvine.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Proclamation

PROSTATE CANCER AWARENESS MONTH
SEPTEMBER 2017

WHEREAS, prostate cancer is the most commonly diagnosed form of cancer, and the third leading cause of cancer-related deaths among men; and

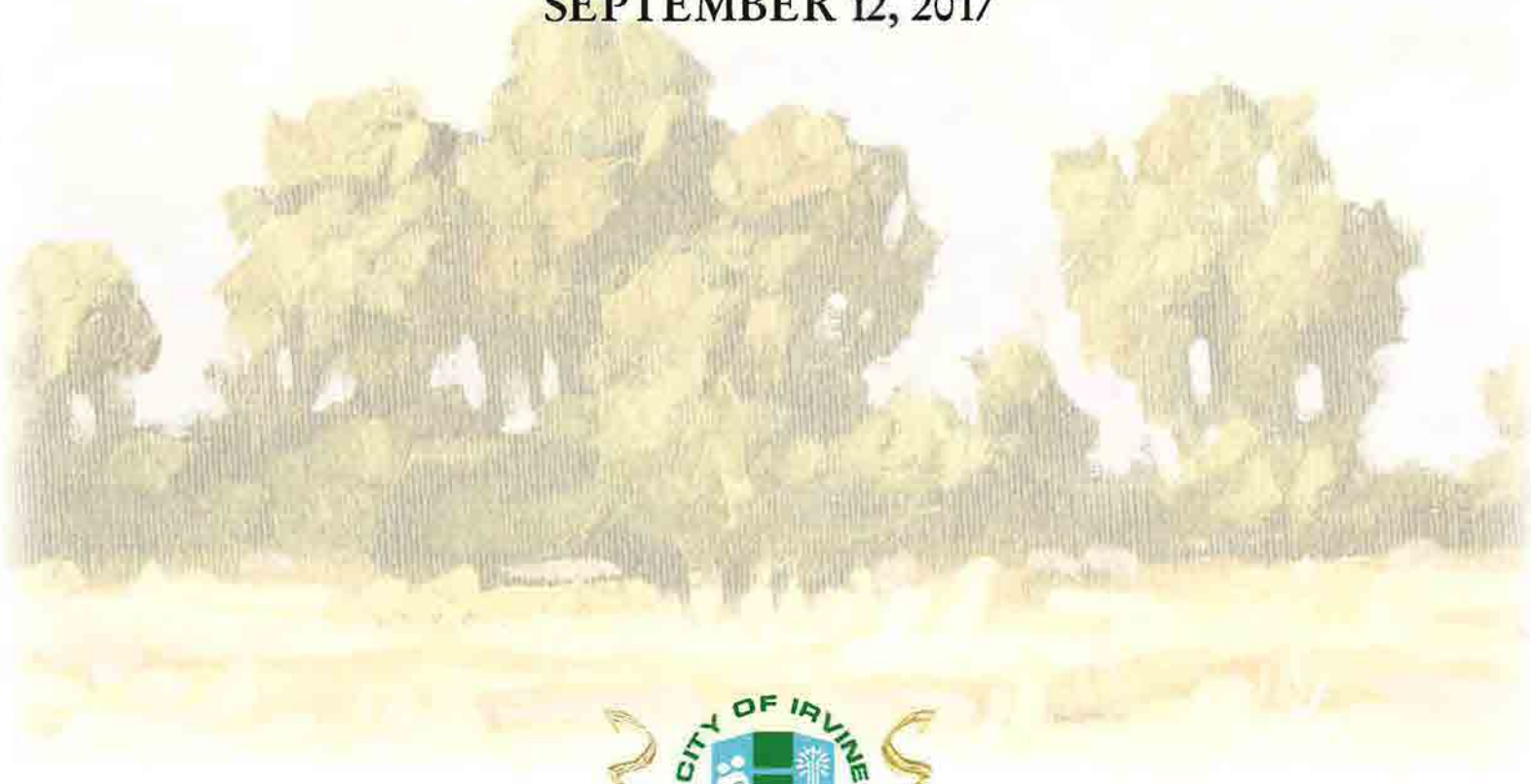
WHEREAS, this year approximately 161,360 men in the United States will be diagnosed, and roughly 26,730 will lose their battle with prostate cancer; and

WHEREAS, African American men are at the highest risk with a diagnosis rate of one out of every six men, and are more than twice as likely to die from the disease; and

WHEREAS, education regarding prostate cancer, and early detection strategies including regular prostate screenings, are critical to saving lives, and preserving and protecting our families.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM SEPTEMBER 2017 as "PROSTATE CANCER AWARENESS MONTH"** in the City of Irvine.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017



CITY OF IRVINE 1971

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CITY OF IRVINE

Proclamation

WORLD ALZHEIMER'S AWARENESS MONTH SEPTEMBER 2017

WHEREAS, Alzheimer's disease is a progressive neurodegenerative brain disorder that tragically robs individuals of their memories and leads to progressive mental and physical impairment; and

WHEREAS, Alzheimer's disease is the sixth leading cause of death in the United States, with over five million Americans living with the disease; and

WHEREAS, each year, family caregivers provide 1,139 hours of care per individual with Alzheimer's and working family caregivers cost California businesses $1.4 billion in lost productivity annually; and

WHEREAS, the City of Irvine recognizes the efforts of Alzheimer's Orange County to provide hands-on care and support, information, referrals, education and resources for families in Orange County and surrounding areas who experience memory loss, Alzheimer's, and other dementias, while advancing critical research for a cure.

NOW THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM SEPTEMBER 2017 as WORLD ALZHEIMER'S AWARENESS MONTH.**

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Proclamation

CONSTITUTION WEEK
SEPTEMBER 17-23, 2017

WHEREAS, September 17, 2017 marks the 230th anniversary of the drafting of the Constitution of the United States of America by the Constitutional Convention; and

WHEREAS, in signing the Constitution, the Framers provided a model of American leadership for generations to come and built a lasting structure of government that began with the words, "We the People"; and

WHEREAS, Public Law 915 guarantees the issuing of a proclamation each year by the President of the United States of America designating September 17-23 as Constitution Week.

NOW THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM THE WEEK OF SEPTEMBER 17-23, 2017 as "CONSTITUTION WEEK"** in the City of Irvine and asks our citizens to reaffirm the ideals of the Framers of the Constitution had in 1787 by vigilantly protecting the freedoms guaranteed to us through this guardian of our liberties.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Commendation

CALIFORNIA STATE UNIVERSITY, FULLERTON
60TH ANNIVERSARY

WHEREAS, California State University, Fullerton was established in 1957 by the California State Legislature and has since grown to eight different colleges supporting over 40,000 students; and

WHEREAS, California State University, Fullerton is an esteemed and significant institution that has shaped and trained generations of leaders, and is a national model for supporting student success by continuing with the organization's long-standing commitment to accessibility; and

WHEREAS, California State University, Fullerton promotes programs and activities to encourage students of all backgrounds, and also educates and empowers first-generation university graduates; and

WHEREAS, California State University, Fullerton embraces our region's rich diversity which enhances the educational experience, uniquely preparing students to excel as leaders in the global marketplace, in further education, and in their communities.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY COMMEND AND CONGRATULATE** California State University, Fullerton on its 60th Anniversary.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Commendation

PUBLIC BROADCASTING SERVICE OF SOUTHERN CALIFORNIA 45TH ANNIVERSARY

WHEREAS, the Public Broadcasting Service of Southern California (PBS SoCal) is the top-rated and most-watched public television station in the Greater Los Angeles area, and the third most-watched PBS station in the nation; and

WHEREAS, PBS SoCal strives to foster a love of learning, culture, and community by using the power of public media, as well as partnerships with significant educational, art, and cultural institutions across the region; and

WHEREAS, PBS SoCal partners with schools and after-school programs throughout the area to help young children become ready for school; and

WHEREAS, PBS SoCal contributes to an increased quality of life for African-Americans and other minorities by encouraging a strong, inclusive, and informed society.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY COMMEND AND CONGRATULATE** Public Broadcast Service of Southern California on its 45th Anniversary.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

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CITY OF IRVINE

Commendation

UNITED SERVICE ORGANIZATIONS
76TH ANNIVERSARY

WHEREAS, the United Service Organizations (the USO) has been the leading organization serving members of our nation's military and their families for 76 years; and

WHEREAS, the USO is a congressionally-chartered, private organization, which relies on the generosity of individuals, and corporations to support its activities, and is powered by a family of volunteers working from 160 centers on every continent except Antarctica; and

WHEREAS, the USO is made up of everyday Americans who donate their time, money, and energy; and who are committed to establishing connections with our men and women in uniform keeping them strong; and

WHEREAS, the USO has been dedicated to the entertainment of our young men and women overseas, bringing a remembrance of home to our troops when they need it most; and

WHEREAS, the USO, in its commitment to support all military service members and their families, has a significant impact and positive influence on the African-American and minority business and education communities in Orange County.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY COMMEND AND CONGRATULATE** United Service Organizations on its 76th Anniversary.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
SEPTEMBER 12, 2017

CITY OF IRVINE 1971

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4.3

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: WARRANT AND WIRE TRANSFER RESOLUTION

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

EXECUTIVE SUMMARY

A detailed register of claims, the Register of Warrants and Wire Transfers, are submitted to the City Council for review and authorization on a weekly basis. Approval of the attached resolution ratifies the disbursement of funds for the period of August 2, 2017 through September 5, 2017 in accordance with Section 2-7-211 of the Irvine Municipal Code.

ATTACHMENT Warrant and Wire Transfer Resolution

CITY COUNCIL RESOLUTION NO. 17-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

(SEE ATTACHED)

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
ABSTAIN:	COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT

8/2/2017 through 8/8/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	541,897.66
004	PAYROLL CLEARING FUND	84,572.97
005	DEVELOPMENT SERVICES FUND	121,855.50
024	BUILDING & SAFETY FUND	25.60
111	GAS TAX FUND	20,603.33
113	FEES & EXACTIONS FUND	177.78
119	LIGHTING, LANDSCAPE & PARK MNT	535,371.23
126	SENIOR SERVICES FUND	166.00
128	OFFICE ON AGING PROGRAMS FUND	4,808.47
155	COMMUNITY SERVICES PROGRAMS	1,502.11
180	ORANGE COUNTY GREAT PARK	98,312.88
250	CAPITAL IMPROV PROJ FUND - CIR	1,152,100.16
260	CAPITAL IMPROV PROJ-NON CIRC	20,213.60
271	IRVINE BUSINESS COMPLEX	1,634.00
501	INVENTORY	20,010.69
570	INSURANCE FUND	57,918.19
574	FLEET SERVICES FUND	51,125.07
578	MAIL INTERNAL SERVICES	9,215.25
579	STRATEGIC TECHNOLOGY PLAN FUND	80,181.20
580	CIVIC CTR MAINT & OPERATIONS	27,279.98
719	REASSESSMENT 85-7A VARIABLE RT	4,819.91
766	RAD 05-21 G3 FIXED RATE	17,700.00
767	AD94-15 WESTPARK II SERIES A	1,862.86
771	AD97-16 NORTHWEST IRVINE VARI	1,862.86
774	AD94-13 VARIABLE RT-OAKCREEK	1,862.87
780	RAD 04-20 G6 FIXED RATE	84.93
	GRAND TOTAL	**2,857,165.10**

8/9/2017 through 8/15/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	693,668.21
004	PAYROLL CLEARING FUND	952,071.02
005	DEVELOPMENT SERVICES FUND	2,795.00
007	SCHOOL SUPPORT FUND	162,610.00
009	REVENUE CLEARING FUND	17,863.54
024	BUILDING & SAFETY FUND	99,561.47
119	LIGHTING, LANDSCAPE & PARK MNT	46,694.83
126	SENIOR SERVICES FUND	1,170.00
128	OFFICE ON AGING PROGRAMS FUND	8,343.21
132	SLURRY SEAL SUR CHG FUND	217,631.48
143	PUBLIC SAFETY GRANTS	8,399.11
180	ORANGE COUNTY GREAT PARK	83,802.02
215	AD 97-16 NORTHWEST IRVINE	193.50
216	AD 97-17 LOWER PETERS CANYON	193.50
260	CAPITAL IMPROV PROJ-NON CIRC	177,970.82
271	IRVINE BUSINESS COMPLEX	2,988.50
286	GREAT PARK DEVELOPMENT FUND	314,986.88
501	INVENTORY	11,140.30
570	INSURANCE FUND	127,261.91
574	FLEET SERVICES FUND	30,917.17
579	STRATEGIC TECHNOLOGY PLAN FUND	171,029.19
580	CIVIC CTR MAINT & OPERATIONS	19,292.80
714	REASSESSMENT 12-1 FIXED RATE	5,505.50
715	AD 13-25 FIXED RATE	259.42
716	RAD 13-1 FIXED RATE	1,886.67
717	RAD 04-20 PORTOLA SPR VAR RT A	82.92
718	RAD 05-21 ORCHARD HLS VAR RT	100.50
719	REASSESSMENT 85-7A VARIABLE RT	57.67
721	AD00-18 SHADY CNYN&TURTL ROCK	38.17
723	AD03-19 WOODBURY SER B VAR RT	31.08
724	AD 07-22 STONEGATE VAR RT A	28.58
726	AD10-23 SERIES B FR LAGUNA ALT	156.33
730	11-24 FIXED RT CYPRESS VILLAGE	808.75
731	AD07-22 GROUP 4 FIXED RATE	528.25
732	RAD 04-20 GROUP 3 FIXED RATE	183.00
735	AD03-19 WOODBURY SER A VAR RT	31.08
760	AD87-8 ICD/BAKE PKWY DEBT SVC	33.00
767	AD94-15 WESTPARK II SERIES A	33.00
771	AD97-16 NORTHWEST IRVINE VARI	2,035.83
772	RAD 15-1 FIXED RATE	3,010.25
773	RAD 15-2 FIXED RATE	1,177.42
774	AD94-13 VARIABLE RT-OAKCREEK	32.00
775	AD97-17 LOWER PETERS CYN EAST	37.75
776	AD93-14 SPECT 6N/SPECT 7	2,052.00
777	RAD 05-21 G1 FIXED RATE	890.08
778	RAD 04-20 G4 FIXED RATE	301.83
779	RAD 04-20 G5 FIXED RATE	119.92

8/9/2017 through 8/15/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
	GRAND TOTAL	**3,170,005.46**

8/16/2017 through 8/22/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	821,135.01
004	PAYROLL CLEARING FUND	1,224,236.22
005	DEVELOPMENT SERVICES FUND	90,331.00
024	BUILDING & SAFETY FUND	124,732.15
027	DEVELOPMENT ENGINEERING FUND	10,121.00
111	GAS TAX FUND	79,324.93
119	LIGHTING, LANDSCAPE & PARK MNT	322,087.78
126	SENIOR SERVICES FUND	395.95
128	OFFICE ON AGING PROGRAMS FUND	902.00
155	COMMUNITY SERVICES PROGRAMS	172.50
180	ORANGE COUNTY GREAT PARK	27,438.83
204	CFD 2013-3 GREAT PARK	2,515.50
215	AD 97-16 NORTHWEST IRVINE	43.00
216	AD 97-17 LOWER PETERS CANYON	43.00
250	CAPITAL IMPROV PROJ FUND - CIR	410,429.43
260	CAPITAL IMPROV PROJ-NON CIRC	97,878.87
270	NORTH IRVINE TRANSP MITIGATION	933.00
271	IRVINE BUSINESS COMPLEX	13,007.50
286	GREAT PARK DEVELOPMENT FUND	25,865.10
501	INVENTORY	12,245.40
570	INSURANCE FUND	56,645.57
574	FLEET SERVICES FUND	59,511.68
579	STRATEGIC TECHNOLOGY PLAN FUND	49,465.00
580	CIVIC CTR MAINT & OPERATIONS	4,049.33
	GRAND TOTAL	**3,433,509.75**

8/23/2017 through 8/29/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	775,924.80
004	PAYROLL CLEARING FUND	955,547.11
005	DEVELOPMENT SERVICES FUND	73,411.00
027	DEVELOPMENT ENGINEERING FUND	1,437.75
111	GAS TAX FUND	2,782.80
119	LIGHTING, LANDSCAPE & PARK MNT	55,658.95
128	OFFICE ON AGING PROGRAMS FUND	19,804.98
139	SUPPL LAW ENFORCEMENT SERVICES	41,014.61
145	STRUCTURAL FIRE FUND	53.19
149	SPECIAL PROGRAM GRANTS	26,265.28
155	COMMUNITY SERVICES PROGRAMS	127.00
180	ORANGE COUNTY GREAT PARK	25,052.12
204	CFD 2013-3 GREAT PARK	15,411.25
218	AD 03-19 NORTHERN SPHERE	3,080.00
250	CAPITAL IMPROV PROJ FUND - CIR	6,955.13
260	CAPITAL IMPROV PROJ-NON CIRC	30,453.62
270	NORTH IRVINE TRANSP MITIGATION	18.50
271	IRVINE BUSINESS COMPLEX	3,500.00
286	GREAT PARK DEVELOPMENT FUND	24,411.65
501	INVENTORY	10,850.84
570	INSURANCE FUND	58,404.89
574	FLEET SERVICES FUND	31,833.50
579	STRATEGIC TECHNOLOGY PLAN FUND	883,643.13
580	CIVIC CTR MAINT & OPERATIONS	4,269.58
744	CFD 2013-3 GREAT PARK	6,185.02
745	CFD 2005-2R COLUMBUS GROVE SP	957.95
746	CFD 2004-1 CENTRAL PARK	1,603.53
773	RAD 15-2 FIXED RATE	1,484.00
	GRAND TOTAL	**3,060,142.18**

8/30/2017 through 9/5/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	462,569.05
004	PAYROLL CLEARING FUND	44,376.69
024	BUILDING & SAFETY FUND	38,920.16
027	DEVELOPMENT ENGINEERING FUND	38,978.75
119	LIGHTING, LANDSCAPE & PARK MNT	103,232.15
126	SENIOR SERVICES FUND	126.37
128	OFFICE ON AGING PROGRAMS FUND	6,521.64
180	ORANGE COUNTY GREAT PARK	88,645.74
204	CFD 2013-3 GREAT PARK	32,678.00
250	CAPITAL IMPROV PROJ FUND - CIR	33,789.57
260	CAPITAL IMPROV PROJ-NON CIRC	170,241.68
270	NORTH IRVINE TRANSP MITIGATION	2,289.00
271	IRVINE BUSINESS COMPLEX	12,518.86
501	INVENTORY	1,712.15
570	INSURANCE FUND	30,206.56
574	FLEET SERVICES FUND	92,951.42
578	MAIL INTERNAL SERVICES	1,103.90
579	STRATEGIC TECHNOLOGY PLAN FUND	9,995.95
580	CIVIC CTR MAINT & OPERATIONS	1,318.00
714	REASSESSMENT 12-1 FIXED RATE	5,505.50
715	AD 13-25 FIXED RATE	709.42
716	RAD 13-1 FIXED RATE	2,336.67
717	RAD 04-20 PORTOLA SPR VAR RT A	732.92
718	RAD 05-21 ORCHARD HLS VAR RT	750.50
719	REASSESSMENT 85-7A VARIABLE RT	707.67
721	AD00-18 SHADY CNYN&TURTL ROCK	688.17
723	AD03-19 WOODBURY SER B VAR RT	1,331.08
724	AD 07-22 STONEGATE VAR RT A	678.58
726	AD10-23 SERIES B FR LAGUNA ALT	606.33
730	11-24 FIXED RT CYPRESS VILLAGE	1,258.75
731	AD07-22 GROUP 4 FIXED RATE	978.25
732	RAD 04-20 GROUP 3 FIXED RATE	633.00
735	AD03-19 WOODBURY SER A VAR RT	681.08
744	CFD 2013-3 GREAT PARK	900.00
745	CFD 2005-2R COLUMBUS GROVE SP	450.00
746	CFD 2004-1 CENTRAL PARK	450.00
760	AD87-8 ICD/BAKE PKWY DEBT SVC	683.00
767	AD94-15 WESTPARK II SERIES A	683.00
770	REASSESSMENT DIST 05-21 G2 FR	900.00
771	AD97-16 NORTHWEST IRVINE VARI	35.83
772	RAD 15-1 FIXED RATE	4,944.25
773	RAD 15-2 FIXED RATE	1,627.42
774	AD94-13 VARIABLE RT-OAKCREEK	32.00
775	AD97-17 LOWER PETERS CYN EAST	687.75
776	AD93-14 SPECT 6N/SPECT 7	5,702.00
777	RAD 05-21 G1 FIXED RATE	1,340.08
778	RAD 04-20 G4 FIXED RATE	751.83

8/30/2017 through 9/5/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
779	RAD 04-20 G5 FIXED RATE	569.92
	GRAND TOTAL	**1,209,530.64**

4.4

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: CITY OF IRVINE INVESTMENT POLICY FOR CALENDAR YEAR 2018

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY'S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2018

EXECUTIVE SUMMARY

The City of Irvine Annual Investment Policy (Policy) provides specific criteria for the prudent investment of the City's funds. The policy applies to the following portfolios that are held by the City: the City's Pooled Investment Portfolio, Bond Proceeds Portfolio, and Special District Funds Portfolio. In accordance with the Policy, the City Council is to review and adopt the Policy annually. The proposed changes to the Policy for calendar year 2018 update language applicable to portfolio management, reporting, and certain definitions in the Glossary.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

The Finance Commission, at its regular meeting of August 21, 2017, recommended the City Council adopt the Policy for Calendar Year 2018 by a unanimous vote, with an additional recommendation to limit the authorized municipal bond investments to 25 percent of the portfolio's cost value.

At its regular meeting of August 9, 2017, the Investment Advisory Committee unanimously voted to recommend that the City Council adopt the Policy for Calendar Year 2018.

ANALYSIS

The City Treasurer, investment manager, and staff evaluate the Annual Investment Policy (Attachment 1) and recommend changes based on various factors including legislative changes, investment management practices, the bond market and economy, or to conform to national and state investment policy standards. Recommended

changes are presented to the Investment Advisory Committee and Finance Commission prior to presentation of the implementing resolution (Attachment 2) to the City Council for adoption.

The Policy is based on State of California Government Code Sections 53600 through 53609 and 53630 through 53686. These laws, as well as guidelines set forth by the Association of Public Treasurers of the United States and Canada, the California Municipal Treasurers Association and the Government Finance Officers Association, have aided City staff in policy development. The State laws and established guidelines encompass a broad array of allowable investments and investment standards to suit the different needs of California's local agencies. The City's Policy is more conservative than what is allowed by State law as it further restricts the percentage of allowable credit investments.

The Policy applies to the City's Pooled Investment Portfolio, Bond Proceeds Portfolio, and Special District Funds Portfolio. These portfolios encompass all funds under the oversight of the City Treasurer including the General Fund, Reserve Funds, Special Revenue Funds, Capital Project Funds, Permanent Fund, Debt Service Funds, Proprietary Funds, Trust and Agency Funds, and other funds that may be created as needed.

There was a statutory change this year regarding the rating requirements contained in Government Code Section 53601. Specifically, rating requirements of commercial paper, medium term notes, mortgage pass-through securities, and supranationals now refer to a rating category which is inclusive of any rating modifiers such as "+/-" or numbers, and equivalent ratings from the Nationally Recognized Statistical Rating Organization (NRSRO). Of the four types of investment instruments impacted by this change, Irvine's Investment Policy permits commercial paper, medium term notes, and supranationals. The City's rating Policy is more restrictive, using NRSRO ratings without modifiers. Consequently the rating category change is not incorporated in the Policy, consistent with the City's conservative investment philosophy.

Updates to certain language used in the Policy, most of which are related to the Bond Proceeds and Special District Funds Portfolios, are summarized as follows:

- Section 2 on page 1 – Scope. Updated Special Districts Portfolio to Special District Funds Portfolio. This name has been updated where applicable in the Policy.
- Section 2 on page 1 – Scope. Added Permanent Fund to the list of funds included in the portfolios. This fund accounts for resources that are legally restricted for the City's senior programs and is part of the Pooled Investment Portfolio.
- Section 3 on page 2 – Delegation of Authority. Added special district funds and Special District Funds Portfolio where referenced to investments managed by the City Treasurer. Added trustee as a custodian holding the City's investments.

These changes are to clarify portfolio and custodian titles, and have been added where applicable in the Policy.

- Section 17 on page 9 - Authorized and Suitable Investments. Changed percentage of municipal bonds in the Authorized Investment Summary Matrix to 25 percent as recommended by the Finance Commission.
- Section 17D on Page 10 – Authorized and Suitable Investments. Updated language to exclude the Special District Funds Portfolio investments from commercial paper investment restrictions in the Policy. Investments in the Special District Funds Portfolio, including commercial paper, are guided by the permitted investments in each bond indenture; therefore, not subject to restrictions in the City's Policy.
- Section 17G on Page 11 – Authorized and Suitable Investments. Updated language to exclude the Bond Proceeds Portfolio investments from Local Agency Investment Fund (LAIF) investment restrictions in the Policy. The Bond Proceeds Portfolio conforms to the permitted investments in each bond indenture or guiding resolution; therefore, is not subject to restrictions in the City's Policy.
- Section 17H on page 11 - Authorized and Suitable Investments. Added language to limit municipal bond investments to 25 percent of the portfolio's cost value as recommended by the Finance Commission.
- Section 20 on Page 14 – Portfolio Reporting. Updated language to reflect implementation of Governmental Accounting Standards Board (GASB) Statement No. 72, Fair Value Measurement and Application.
- Updated glossary definitions of Broker, Comprehensive Annual Financial Reporting (CAFR), Dealer, Discount, Fiscal Agent, Premium, and Uniform Net Capital Rule.

The Finance Commission's recommendation to limit municipal bond investments to 25 percent does not impact the City's portfolio. The City does not hold any municipal bond investments.

ALTERNATIVES CONSIDERED

The recommended changes to the City's Investment Policy are not mandatory and the Policy could be approved with no changes. However, the proposed changes clarify portfolio titles and terms, ensuring the Policy's intent is consistently applied. The City could also choose to modify the Policy to include the rating category change, which would make the Policy less restrictive.

FINANCIAL IMPACT

None.

REPORT PREPARED BY Don Collins, City Treasurer
Jennifer King, Finance Administrator

ATTACHMENTS:
1. Annual Investment Policy Red Lined
2. Resolution

City of Irvine

Annual Investment Policy
Calendar Year 2017~~7~~8

Don Collins
City Treasurer

ATTACHMENT 1

City of Irvine
Annual Investment Policy
Calendar Year 2017~~7~~8

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Bylaws of the Investment Advisory Committee A-1

CITY OF IRVINE
ANNUAL INVESTMENT POLICY
FOR CALENDAR YEAR 2017~~7~~8

1. INTRODUCTION

This statement of Investment Policy is intended to provide specific criteria for the prudent investment of City funds. The ultimate investment goal is to enhance the economic status of the City while protecting funds under management and meeting the daily cash flow demands of the City. This investment policy has been prepared in conformance with all pertinent existing laws of the State of California including California Government Code Sections 53600, et seq.

2. SCOPE

This investment policy applies to the City's Irvine Pooled Investment Portfolio, Bond Proceeds Portfolio held by the City, and Special District Funds Portfolio. These portfolios encompass all monies under the direct oversight of the Treasurer and include the General Fund, Reserve Funds, Special Revenue Funds, Debt Service Funds, Capital Project Funds, Permanent Fund, Proprietary Funds, Trust and Agency Funds, Successor Agency to the Dissolved Irvine Redevelopment Agency, and any other funds that may be created. These funds are accounted for in the City of Irvine's Comprehensive Annual Financial Report.

3. DELEGATION OF AUTHORITY

Authority to manage the City of Irvine's investment program is derived from the Charter of the City of Irvine, Section 2-2-101(B). The authority of the City Council to invest or reinvest monies of the City has been delegated by the City Council to the City Treasurer for one year or until such time the delegation is revoked. The City Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials, and their procedures in the absence of the City Treasurer. The City Treasurer may delegate daily investment activity, such as carrying out the Treasurer's investment instructions, confirming treasury transactions, and other routine activities.

The City Treasurer shall establish written investment policy procedures for the operation of the investment program consistent with this policy. The procedures should include reference to: safekeeping, master repurchase agreements, wire transfer agreements, banking service contracts and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the City Treasurer.

The Treasurer is responsible for the investment of bond proceeds and special district funds, whether held by the City, ~~or with~~ a fiscal agent or trustee. The Bond Proceeds and Special District Funds ~~p~~Portfolio~~(s)~~ shall be segregated from the Irvine Pooled Investment Portfolio of the City and will be structured with maturities (or maintain an average maturity) sufficient to meet construction draws, debt service payments and other short-term liabilities. For purposes of efficiency, the Treasurer may instruct each fiscal agent or trustee to purchase certain securities regarding the investment of bond proceeds and special district funds in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Where present, bond indenture and guiding resolution documentation for investment of ~~B~~bond ~~P~~proceeds and ~~S~~special ~~D~~district funds will supersede the City of Irvine Investment Policy guidelines. The Investment Advisory Committee will be advised of any investments made outside of the Investment Policy, pursuant to bond indentures and/or guiding resolutions.

Currently, management of the Irvine Pooled Investment Portfolio, Bond~~s~~ Proceeds Portfolio, and Special District~~s~~ Funds Portfolio has been delegated to a contract management firm that has full authority to execute investment transactions on behalf of the City. In the event the contract management firm is not able to execute investment transactions, the City Treasurer and Deputy City Treasurer ha~~s~~ve the authority to execute investment transactions.

4. ETHICS AND CONFLICTS OF INTEREST

Officers and employees involved in the investment process shall refrain from personal business activity that conflicts with proper execution of the investment program or that impairs their ability to make impartial investment decisions. Employees and investment officials shall disclose any material financial interests that could be related to the performance of the City's investment policy annually with the California Fair Political Practices Commission or as necessary under the Political Reform Act and Government Code Section 1090 et seq.

5. PRUDENCE/PRUDENT INVESTOR STANDARD

The Treasurer operates the City's pooled cash investment program under the Prudent Investor Standard, Government Code Section 53600.3, and applicable State laws. When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, the Treasurer shall act

with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the City, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the City. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired and sold as authorized by law. This affords a broad spectrum of investment opportunities so long as the investment is deemed prudent and permissible by the State of California, various bond indentures and this policy. The Treasurer strives to invest 100 percent of idle funds.

6. INTERNAL CONTROLS

The Treasurer and Manager of Fiscal Services shall establish procedures that separate the internal responsibility for management and accounting of the investment portfolios. An analysis by an external independent auditor shall be conducted annually to review internal controls, account activity and compliance with policies and procedures.

7. INVESTMENT OBJECTIVES

The City's cash management system is designed to accurately monitor and forecast revenues and expenditures, thus enabling the Treasurer to invest funds to the fullest extent possible. The Treasurer maintains a diversified portfolio to accomplish the primary objectives in the order of safety, liquidity, and yield.

Safety: The safety/risk associated with an investment refers to the potential loss of principal, accrued interest or a combination of these. The Treasurer seeks to mitigate credit risk by monitoring financial institutions with which he/she will do business, and by careful scrutiny of the credit worthiness of the investment instruments as well as the institutions. Such resources as a nationally recognized statistical-rating organization (NRSRO) services are utilized for this review. The Treasurer seeks to mitigate interest rate risk through diversification of instruments as well as maturities.

Liquidity: The portfolio will be structured with sufficient liquidity to allow the Treasurer to meet anticipated cash requirements. This will be accomplished through the purchase of a diversity of instruments to include those with active secondary markets, those that can match maturities to expected

cash needs, and the State Local Agency Investment Fund (LAIF) with immediate withdrawal provisions.

Yield: A competitive market rate of return is the third objective of the investment program after the fundamental requirements of safety and liquidity have been met. The portfolio shall be managed to consistently attain a market rate of return throughout budgetary and economic cycles. Whenever possible, and consistent with risk limitations and prudent investment management, the City will seek to augment returns above the market average rate of return through the implementation of active portfolio management strategies.

8. PERFORMANCE EVALUATION

Investment performance is continually monitored and evaluated by the City Treasurer. Investment portfolio reports are generated on a monthly and quarterly basis and submitted to the City Council, City Manager, and Investment Advisory Committee. A quarterly Treasurer's report is also presented to the City Council, Finance Commission, and Investment Advisory Committee during respective regularly scheduled meetings.

The investment portfolio reports are to be submitted within 30 days of the end of the reporting period. The monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 6-month CMT (Constant Maturity Treasury) as calculated by the Federal Reserve Bank of New York. As an added reference, the monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 2-year CMT as calculated by the Federal Reserve Bank of New York.

9. DIVERSIFICATION

The City will diversify use of investment instruments to avoid unreasonable risks inherent in over-investing in specific instruments, individual financial institutions, or maturities.

Market price volatility shall be controlled through maturity diversification, as well as ensuring adequate liquidity is available to meet cash flow requirements, thereby precluding the need to sell instruments at a market loss.

Risk of default will be controlled by acquiring instruments such as

Government Securities, or by diversifying the portfolio within the constraints and parameters of Section 17 of this Policy, Authorized and Suitable Investments.

10. PORTFOLIO SEGREGATION

Within the overall funds managed by the Treasurer, bond proceeds and special district funds shall be segregated from the general City pool into their own pool and be invested in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Furthermore, bond proceeds held by fiscal agents or trustees shall also be segregated and invested in accordance with each indenture.

The primary purpose of any separately managed bond proceeds and special district funds portfolios is to structure investment maturities to meet current and future liabilities. The preservation of principal and the maintenance of liquidity are the most important factors regarding the investment of bond proceeds and special district funds. Portfolio yield is not a primary factor since the portfolio structure, eligible investment assets and maturity restrictions are governed by draws and expenditure schedules of the issues. Performance will be based upon maximizing permitted positive arbitrage within the context of principal preservation as a first priority (pre-1986 Tax Reform Act issuances) or minimizing or eliminating negative arbitrage (yield-restricted issues).

11. BOND ISSUANCE ARBITRAGE REBATE

The U.S. Tax Reform Act of 1986 requires the City to perform annual arbitrage calculations and rebate excess earnings to the U.S. Treasury for investment returns that exceed the allowable interest earnings limit of each bond issue. The arbitrage calculation process must be conducted for the investment of proceeds of bond issues sold after the effective date of this law. This arbitrage calculation will be contracted out to provide the necessary technical expertise to comply with this regulation. The City's investment position relative to the interest rate arbitrage restrictions is to have safety and the highest permitted return the law allows as the highest priority while ensuring the preservation of principal and liquidity.

12. QUALIFIED DEALERS

The Treasurer shall transact business only with Registered Investment

Advisors, national or state-chartered banks, savings and loans, and broker dealers. The dealers should be primary dealers regularly reporting to the New York Federal Reserve Bank, or approved regional or secondary market dealers that qualify under the Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule).

The Treasurer may direct a fiscal agent or trustee to execute investment transactions on behalf of the City for funds held by that fiscal agent or trustee.

The City may purchase "prime" quality rated commercial paper from its direct issuer if it presents a higher return than in the secondary market.

The Treasurer will monitor broker/dealers and their firms, to ensure they are in good standing with the appropriate regulatory agencies. The Treasurer will review financials and report back to the Investment Advisory Committee.

13. SAFEKEEPING OF SECURITIES

To protect against losses caused by the collapse of individual securities dealers, all securities owned by the City, including collateral for repurchase agreements, shall be held in safekeeping by a third party bank trust department acting as agent for the City under the terms of a custody agreement or, in the case of funds held by the fiscal agent or trustee, the fiscal agent or trustee shall segregate and report securities held on the City's behalf. Any trade executed by a dealer is required to settle on a delivery versus payment basis with the City's safekeeping agent.

Fiscal agents or trustees in receipt of City of Irvine bond proceeds will settle security transactions on a delivery versus payment method based upon instructions provided by the Treasurer or the City's investment advisor. The fiscal agents or trustees will issue monthly custodian statements evidencing securities held in safekeeping, including the receipt of interest and maturity proceeds, the disbursement of funds for the purchase of securities, and the receipt of any sale proceeds.

14. COLLATERALIZATION

All demand deposits, time deposits and repurchase agreements are to be fully collateralized with securities authorized by the California Government Code and the City.

1. The eligible collateral for repurchase agreements must be those investments authorized by Section 53651 of the California Government Code. The Treasurer may specify the type of eligible collateral for use in repurchase agreements. Eligible collateral must be in book entry form. Collateral is valued at current market plus accrued interest through the date of valuation.

   a. The cost value (book value) of collateral pledged for demand deposits must at all time be equal to or greater than the amount on deposit, plus accrued interest, in accordance with the following ratio:

U.S. Treasury Securities	110%

   b. The cost value (book value) of collateral pledged for repurchase agreements must at all time be equal to or greater than the par amount, plus accrued interest, with the following ratios:

U.S. Treasury Securities	102%
U.S. Government Agencies	102%

2. It is the policy of the City to require reports at least on a quarterly basis from institutions with which the Treasurer has pledged security interest. The Treasurer shall monitor the adequacy of collateralization to ensure that balances are collateralized in accordance with the ratios approved herein.

3. With regard to repurchase agreements, it is the policy of the City to initiate a margin call in the event pledged collateral falls below the appropriate ratio.

4. Collateralized investments and deposits often require substitution of collateral. Any broker or financial institution requesting substitution must contact the City for approval in the event the counterparty to the transaction is not authorized under agreement with the City to make substitutions.

15. MAXIMUM MATURITIES

1. Pooled Investment Portfolio

   In accordance to California Government Code Section 53601, The City will not invest in any securities maturing more than five (5) years

from the settlement date of purchase. If the Treasurer desires to make investments longer than five years, express authority to make those investments, either specifically or as part of an investment program, must be approved by the City Council no less than three months prior to the investment. In no event will securities with maximum maturities beyond four years exceed 40 percent of the portfolio's total carrying cost at the time of purchase.

2. Bond Proceeds Portfolio/Special District Funds Portfolio

The Bond Proceeds and Special District Funds ~~p~~Portfolios held by the City, ~~and/or~~ fiscal agents or trustees will be structured with maturities sufficient to meet current and future disbursements and other liabilities consistent with the purpose of each bond issue. The Treasurer may match maturities to defined future liabilities or may structure the portfolio in such a manner as to maintain an average maturity and a defined liquidity percentage necessary to meet estimated liabilities. In no event will securities be purchased with final maturities that exceed a specifically defined future liquidity requirement (such as bond reserve fund availability requirement) or liability.

16. INVESTMENT POOLS/MONEY MARKET MUTUAL FUNDS

A thorough investigation of any government sponsored pool and/or mutual fund is required prior to investing and on a continual basis. There shall be a questionnaire completed which will provide the following information:

- A description of eligible investment securities, and a written statement of investment policy and objectives.
- A description of interest calculations and how it is distributed, and how gains and losses are treated.
- A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program audited.
- A description of who may invest in the program, how often, and what size of deposits and withdrawals are allowed.
- A schedule for receiving statements and portfolio listings.
- A description of how the pool/fund utilizes reserves, retained earnings, etc.
- A fee schedule, including when and how fees are assessed.
- The eligibility of the pool/fund to invest in bond proceeds and

special district funds, and a description of its practices.

17. AUTHORIZED AND SUITABLE INVESTMENTS

The City is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations and based on the cost at the time of purchase, the following investments are authorized as further limited herein:

Authorized Investment Summary Matrix

Category		Percent
A.	US Treasuries	no limit
B.	US Agencies	no limit
C.	Bankers' Acceptances	25%
D.	Commercial Paper	15%
E.	Repurchase Agreements	25%
F.	Reverse Repurchase Agreements	15%
G.	Local Agency Investment Fund (LAIF)	25%
H.	Municipal Bonds	~~no limit~~25%
I.	Corporate Medium Term Notes	15%
J.	Money Market Mutual Funds	20%
K.	Supranationals	10%

A. United States Treasury Bills, Bonds, and Notes, or those for which the full faith and credit of the United States are pledged for payment of principal and interest. There is no limitation as to the percentage of the portfolio that can be invested in this category.

B. Obligations issued by United States Federal agencies or government-sponsored enterprise obligations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. Although there is no percentage limitation on these issues, the "prudent investor" standard shall apply to investments from a single agency.

C. Bills of exchange or time drafts drawn on and accepted by a commercial bank, otherwise known as Bankers' Acceptances. Bankers' Acceptances purchased may not exceed 180 days to maturity or 25 percent of the cost (book) value of the portfolio. No more than $5 million may be invested in Bankers' Acceptances issued by any one bank. Prior to the purchase of any Banker's

Acceptance, the portfolio manager shall review the rating of the issuing bank. Bankers' Acceptances of issuing financial institutions shall have both a short and long term rating in the highest category by at least one nationally recognized rating agency at the time of purchase.

D. Commercial ~~P~~paper ranked of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by NRSRO and issued by a domestic corporation having assets in excess of $500 million. The commercial paper must also have an "A" or better rating for the issuer's debt, other than commercial paper, if any, as provided by a NRSRO. Purchase of commercial paper from corporations on negative credit watch by a major rating agency shall be prohibited. Purchases of eligible ~~C~~ccommercial ~~P~~ppaper may not exceed 270 days to maturity. Excluding the Special District Funds Portfolio, ~~P~~ppurchases of ~~C~~ccommercial ~~P~~ppaper may not exceed 15 percent of the cost value of the portfolio at time of purchase~~.~~, and ~~N~~no more than 3 percent of the cost value of the portfolio may be invested in ~~C~~ccommercial ~~P~~ppaper issued by any one corporation. Corporate ~~M~~mmedium ~~T~~tterm ~~N~~nnote and bankers' acceptance holdings shall be considered when calculating the maximum dollar amount in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

E. Repurchase agreements. The City may invest in repurchase agreements with banks and primary dealers with whom the City has entered into a master repurchase agreement that specifies terms and conditions of repurchase agreements. No more than 25 percent of the cost value of the portfolio may be invested in repurchase agreements at any time. The maturity of repurchase agreements shall not exceed 75 days.

The cost value of securities used as collateral for repurchase agreements shall be monitored daily by the Treasurer and will not be allowed to fall below the margin ratios specified in Section 14 (1)(b) of this policy. In order to conform with provisions of the Federal Bankruptcy Code which provides for the liquidation of securities held as collateral for repurchase agreements, the only securities

acceptable as collateral shall be securities that are direct obligations of, or that are fully guaranteed as to principal and interest by, the United States Government such as Treasury bills, Treasury notes or Treasury bonds with less than a five year maturity.

F. Reverse repurchase agreements. The City may invest in reverse repurchase agreements only with those banks and primary dealers with whom the City has entered into a master repurchase agreement outlining terms and conditions of repurchase and reverse repurchase agreements. The City may only invest in reverse repurchase agreements for the following purpose:

1. The City may enter into reverse repurchase agreements when funds obtained through the reverse can be reinvested in a higher yielding security to obtain additional interest income for the City at a spread deemed to be acceptable by the Treasurer under then prevailing market conditions. Reverse repurchase agreements entered into in accordance with this paragraph may not exceed 75 days to maturity and must be matched as to maturity and dollars invested with its corresponding reinvestment. No more than 15~~%~~ percent of the cost value (book value) of the portfolio may be invested in reverse repurchase agreements.

2. Reverse repurchase agreements may be used for liquidity purposes when it is determined that the portfolio has sufficient additional collateral coming due within the term of the reverse repurchase agreement equal to or exceeding the amount of the reverse repurchase agreement.

G. The City may invest in the LAIF established by the State Treasurer for the benefit of local agencies up to the maximum permitted by State law, but not to exceed 25 percent of the cost value (book value) of the total portfolio exclu~~sive~~ding ~~of~~ the ~~fiscal agent cash~~Bond Proceeds ~~p~~Portfolio.

H. Bonds issued by local agencies of the United States, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency or by a department, bo~~a~~r~~r~~d, agency, or authority of the local agency rated "AA" or better by a NRSRO. "AA" rated bonds shall be limited to 36 months maximum maturity and "AAA" rated bonds shall be limited to 60 months maximum maturity. No more than 25 percent of the cost value (book value) of the portfolio may be invested in municipal

bonds.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

I. Corporate medium term notes issued by a domestic corporation having assets in excess of $500 million and having an "AA" or better rating criteria at time of purchase on its long-term debentures as provided by a NRSRO. Purchase of corporate medium term notes from corporations on negative credit watch by a major rating agency shall be prohibited. "AA" rated medium term notes shall be limited to 36 months maximum maturity and "AAA" rated medium term notes shall be limited to 60 months maximum maturity. The aggregate total of all purchased medium term notes may not exceed 15 percent of the cost value of the portfolio. No more than 3 percent of the cost value of the portfolio may be invested in corporate medium term notes issued by any one corporation. Commercial ~~P~~paper and bankers' acceptance holdings shall be considered when calculating the maximum percentage in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

J. Money ~~M~~market ~~M~~mutual funds having a rating of "AAA" or an equivalent by no less than two NRSRO with no load and maintained at $1 par value. No more than 20 percent of the cost value of portfolio value at time of purchase, excluding the Special District Funds Portfolio, should be invested in this category, and the City's investment in any specific mutual fund will not exceed 2 percent of that mutual fund's total assets.

K. Supranational securities of United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American

Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AAA" or better by an NRSRO and shall not exceed 10 percent of the agency's moneys that may be invested pursuant to this section.

18. INELIGIBLE INVESTMENTS

Investments not described herein including, but not limited to, equity securities such as common stocks, preferred stocks, convertibles, inverse floaters, range notes and interest-only strips that are derived from a pool of mortgages are prohibited from use in this portfolio. The City is prohibited from entering into a margin agreement and/or borrowing on margin.

19. INVESTMENT ADVISORY COMMITTEE

The City has created a five-member Investment Advisory Committee as a standing Committee to advise the City on matters relating to the City's Investment Policy and the investment of City funds. The Committee meets at least quarterly with the Treasurer and City staff and reports directly to the City Council. Each Councilmember appoints one person to the Committee. The Committee member's term is concurrent with the term of the appointing Councilmember. The Committee will be governed by a set of Bylaws (Exhibit A) to be reviewed and approved annually.

20. PORTFOLIO REPORTING

In accordance with California Government Code, Sections 53607 and 53646(b), the Treasurer shall provide on a monthly and quarterly basis (or as otherwise requested by the City Manager) an investment portfolio to the City Council. The report shall include a listing of each of the City's investments (a description that adequately describes the security), the purchase date, maturity date, cost basis, current cost value (book value), interest rate, weighted average maturity, current unrealized loss or gain and a listing of investment transactions that includes purchase/deposit and sale/withdrawal activity. Various investment types will be categorized and grouped in the same structure as the qualified investment categories identified in this policy. The portfolio report shall include a statement certifying the ability of the City to meet its expenditure requirements for the next six months, or provide an explanation as to why sufficient money shall, or may, not be available. The report will also include comments on the

fixed income markets and economic conditions, and the effect, if any, on the portfolio structure and investment strategy. The report shall also detail all repurchase and reverse repurchase positions and associated liabilities.

The investment portfolio report shall include market value information for all investments. A monthly market value will be obtained for each security owned by the City. For purposes of reporting, the market value of each security may be obtained from the City's custodian bank or other pricing source(s) utilized by the City's designated investment management firm (registered investment advisor).

The City shall record interest revenue on a modified accrual basis of accounting that is typical for reporting and recording of interest earnings. Securities held by a fiscal agent or trustee shall also be recorded on a modified accrual basis of accounting. The Treasurer will report year-end investments in conformance with Governmental Accounting Standards Board Statement Nos. 31, 40, and ~~40~~72.

The Treasurer will provide a monthly reconciliation of all funds included in the investment portfolios. The reconciliation shall utilize all available information including the City's books, the Demand Deposit Bank account, the custodian's statement, and the fiscal agent and trustee's statement.

21. REVIEW OF INVESTMENT PORTFOLIO

The securities held by the City must be in compliance with Section 17, Authorized and Suitable Investments, at the time of purchase. The Treasurer shall review the portfolios quarterly to identify any securities that are no longer in compliance. The Treasurer shall report any major and critical incidences of noncompliance in the quarterly treasurer's report to the City Council and Investment Advisory Committee.

22. INVESTMENT POLICY ADOPTION

The City Council shall review and adopt this Investment Policy by resolution annually.

GLOSSARY

AGENCIES – Agencies of the Federal government set up to supply credit to various classes of institutions (e.g., S&L's, small business firms, students, farmers, housing agencies, etc.) Examples include Federal Home Loan Mortgage Corporation (FHLMC), Federal National Mortgage Association (FNMA), Federal Home Loan Bank (FHLB), and Federal Farm Credit Bank (FFCB).

ASK/OFFER – The price at which securities are offered. (The price at which a firm will sell a security to an investor)

BANKERS' ACCEPTANCE (BA) – A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the issuer.

BASIS POINT – One one-hundredth of a percent (i.e., 0.01 percent)

BEAR MARKET – A period of generally pessimistic attitudes and declining market prices.

BID PRICE – The price at which a broker/dealer will buy securities from an investor.

BOND EQUIVALENT YIELD – The basis on which yields on notes and bonds are quoted.

BOOK VALUE (COST VALUE) – The purchase price of the security as recorded on the City's books.

BROKER~~/DEALER~~ – An individual or firm acting as intermediary by purchasing and selling securities for others~~principal in a securities transaction~~.

BULL MARKET – A period of generally optimistic attitudes and increasing market prices.

CALLABLES – Securities that the issuer has the right to redeem prior to maturity.

CERTIFICATE OF DEPOSIT (CD) - A time deposit with a specific maturity evidenced by a certificate. Large denomination CD's are typically negotiable.

CMT – Constant Maturity Treasury – An index of the average yield on United States Treasury securities adjusted to a constant maturity.

COLLATERAL – Securities, evidence of deposit or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) - The official annual report of the City. It includes ~~five~~ combined statements for each individual fund and account group prepared in conformity with Generally Accepted Accounting Principles (GAAP). It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

CORPORATE MEDIUM TERM NOTE – A security issued by a corporation doing business in the U.S. with a maturity not to exceed five years.

COST VALUE (BOOK VALUE) – The purchase price of the security as recorded on the City's books.

COUPON – a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value; b) a certificate attached to a bond evidencing interest due on a payment date.

DEALER – An individual or firm acting as principal in a security transaction.

DEBENTURE - A bond secured only by the general credit of the issuer.

DELIVERY VS PAYMENT - Delivery of securities with a simultaneous exchange of money.

DEMAND ACCOUNT – An account with a commercial bank from which check withdrawals may be made at any time.

DERIVATIVES – Financial products that are dependent for their value on (or derived from) an underlying financial instrument, a commodity, or an index representing values of groups of such instruments or assets.

DISCOUNT – The difference between the cost price of a security and its ~~maturity~~par value when ~~quoted at~~the cost is lower than ~~face value~~par. A security selling below original offering price shortly after sale also is considered to be at a discount.

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DIVERSIFICATION – Dividing investment funds among a variety of securities offering independent returns.

FEDERAL FUNDS RATE – Interest rate charged by one institution lending federal funds to another.

FEDERAL OPEN MARKET COMMITTEE (FOMC) – Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

FINANCIAL ADVISOR – A firm or bank that acts in a financial advisory capacity with respect to a new issue of municipal securities pursuant to a written contract.

FISCAL AGENT – A financial institution which performs payment of principal and interest to bondholders, and certain administrative duties on the bond issuer's behalf.~~with trust powers which acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.~~

GOVERNMENTAL ACCOUNTING STANDARDS BOARD – The independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.

INTERNAL RATE OF RETURN – Rate of return over the life of a security on variables.

LOCAL AGENCY INVESTMENT FUND (LAIF) – The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

MARKET VALUE – The price at which a security is trading, usually the liquidation value.

MASTER REPURCHASE AGREEEMENT – A written contract covering all future transactions between the parties to repurchase-reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

MONEY MARKET MUTUAL FUNDS – Open-ended mutual fund that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid and safe securities, and pays money market rates of interest. The fund's net asset value remains a constant $1 a share, with the interest rate increasing or decreasing.

NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION (NRSRO) – A rating organization designated by the SEC as being nationally recognized.

OFFER PRICE – The price at which a broker/dealer will offer securities to an investor.

OPEN MARKET OPERATIONS – Federal Reserve activity. Under the Federal Reserve Act, the Fed uses purchases and sales of Government and Federal Agency securities to add to or subtract from commercial bank reserves. Goals are to sustain economic growth, high employment and reasonable price stability.

PAPER GAIN OR LOSS – Term used for unrealized gain or loss on securities being held in a portfolio based on comparison of current market quotes and their original cost. This situation exists as long as the security is held while there is a difference between cost value (book value) and the market value.

PORTFOLIO – Collection of securities held by an investor.

PREMIUM – The difference between the cost price of a security and its par value, when the cost is higher than par.

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PRIMARY DEALER – A group of government securities dealers that serve as trading counterparties of the New York Fed in its implementation of monetary policy. This role includes the obligations to: (i) participate consistently in open market operations to carry out U.S. monetary policy pursuant to the direction of the Federal Open Market Committee (FOMC); and (ii) provide the New York Fed's trading desk with market information and analysis helpful in the formulation and implementation of monetary policy. Primary dealers are also required to participate in all auctions of U.S. government debt and to make reasonable markets for the New York Fed when it transacts on behalf of its foreign official account-holders.

RATE OF RETURN – The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity; on a bond, the current income return.

REPURCHASE AGREEMENT (REPO) – A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security "buyer" in effect lends the "seller" money for the period of the agreement, and the terms of the agreement are structured to compensate them for this.

REVERSE REPURCHASE AGREEMENT (REVERSE REPO) – A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specific date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

SAFEKEEPING – The service provided by banks and trust companies for clients when the bank or trust company stores the securities, takes in coupon payments, and redeems issues at maturity.

SECURITIES & EXCHANGE COMMISSION (SEC) - Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15(C) 3-1 – See Uniform Net Capital Rule.

SPREAD – a) The yield or price difference between the bid and offer on an issue; b) the yield or price difference between different issues.

SUPRANATIONALS – International institutions formed by two or more governments that transcend boundaries to pursue mutually beneficial economic or social goals. There are three supranational institutions that issue obligations that are eligible investments for California local agencies: the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB).

SWAP – The sale of one issue and the simultaneous purchase of another for some perceived advantage.

TREASURY BILLS – A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months or one year.

TREASURY BONDS – U.S. Treasury securities that have initial maturities of more than 10 years.

TREASURY NOTES – Intermediate-term coupon bearing U.S. Treasury securities having initial maturities ~~of~~ from one year to ten years.

TRUSTEE – A financial institution with trust powers that acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.

UNIFORM NET CAPITAL RULE – Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities~~, one reason new public issues are spread among members of underwriting syndicates~~. Liquid capital includes cash and assets easily converted into cash.

WHEN ISSUED BASIS (WI) – A term applied to securities that are traded before they are actually issued with the stipulation that transactions are null and void if securities are not issued.

YIELD CURVE – Yield calculations of various maturities at a given time to observe spread difference.

YIELD TO MATURITY – The current coupon yield minus any premium above par, or plus any discount from par in the purchase price with the adjustment spread over the period from date of purchase to maturity.

Exhibit A

BYLAWS OF THE INVESTMENT ADVISORY COMMITTEE OF THE CITY OF IRVINE

ARTICLE I - PURPOSE

The purpose of the Investment Advisory Committee is to oversee the management of the investment portfolio through regular quarterly meetings. The Committee will review investment transactions, discuss economic conditions and strategies regarding the management of the portfolio, and report to individual Councilmembers on the meetings.

ARTICLE II - STRUCTURE

The Committee shall be comprised of five members. Each Councilmember shall be responsible for appointing one member to the Committee with the term of the member running concurrent with the term of the Councilmember making the appointment.

The Chairperson and Vice Chairperson of the Committee shall be elected by a majority vote of the members and shall hold the seat for a one-year term. These positions may be elected for two consecutive terms. At the end of the second consecutive term, the members shall elect a new Chairperson and Vice Chairperson.

ARTICLE III - MEETINGS

The meetings shall be held at least quarterly at Irvine City Hall. Each meeting shall be held prior to the presentation of the quarterly report to Council on the status of the portfolio. Three members of the Committee must be present to constitute a quorum.

ARTICLE IV - PARLIAMENTARY PROCEDURE

The rules contained in the current edition of Robert's Rules of Order, newly revised, shall govern the Committee in all cases to which they are applicable and where they are not inconsistent with these Bylaws.

ARTICLE V - AMENDMENT OF BYLAWS

These Bylaws may be amended by a majority vote of the Committee.

CITY COUNCIL RESOLUTION NO. 17-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY'S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2018

WHEREAS, the City Council of the City of Irvine recognizes the importance of economic and financial affairs with regard to the proper functioning of City Government and the well being of the citizens of Irvine; and

WHEREAS, the California Government Code requires that the City Council annually review the City's investment policy; and

WHEREAS, the City Council recognizes the need for the Treasurer of the City of Irvine to conduct the investment of City monies under certain parameters on a day-to-day basis; and

WHEREAS, Section 2-2-101(B) of the City of Irvine Charter authorizes the City Council of the City of Irvine to delegate authority to its City Treasurer to invest, reinvest, sell or exchange securities until such time as this delegation of authority is revoked; and

WHEREAS, the City Council has appointed an Investment Advisory Committee who have recommended that the City Council approve the Annual Investment Policy as submitted.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The preceding recitals are all true and correct.

Section 2. That the City Council of the City of Irvine hereby delegates the authority to reinvest funds of the City of Irvine pursuant to all applicable laws, statutes, and regulations of the State of California as set forth in this Resolution.

Section 3. The City Council of the City of Irvine hereby adopts the attached Annual Investment Policy for Calendar Year 2018 (Exhibit A).

Section 4. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September, 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, California, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September, 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE



City of Irvine

Annual Investment Policy
Calendar Year 2018

Don Collins
City Treasurer

EXHIBIT A

City of Irvine
Annual Investment Policy
Calendar Year 2018

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CITY OF IRVINE
ANNUAL INVESTMENT POLICY
FOR CALENDAR YEAR 2018

1. INTRODUCTION

This statement of Investment Policy is intended to provide specific criteria for the prudent investment of City funds. The ultimate investment goal is to enhance the economic status of the City while protecting funds under management and meeting the daily cash flow demands of the City. This investment policy has been prepared in conformance with all pertinent existing laws of the State of California including California Government Code Sections 53600, et seq.

2. SCOPE

This investment policy applies to the City's Irvine Pooled Investment Portfolio, Bond Proceeds Portfolio held by the City, and Special District Funds Portfolio. These portfolios encompass all monies under the direct oversight of the Treasurer and include the General Fund, Reserve Funds, Special Revenue Funds, Debt Service Funds, Capital Project Funds, Permanent Fund, Proprietary Funds, Trust and Agency Funds, Successor Agency to the Dissolved Irvine Redevelopment Agency, and any other funds that may be created. These funds are accounted for in the City of Irvine's Comprehensive Annual Financial Report.

3. DELEGATION OF AUTHORITY

Authority to manage the City of Irvine's investment program is derived from the Charter of the City of Irvine, Section 2-2-101(B). The authority of the City Council to invest or reinvest monies of the City has been delegated by the City Council to the City Treasurer for one year or until such time the delegation is revoked. The City Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials, and their procedures in the absence of the City Treasurer. The City Treasurer may delegate daily investment activity, such as carrying out the Treasurer's investment instructions, confirming treasury transactions, and other routine activities.

The City Treasurer shall establish written investment policy procedures for the operation of the investment program consistent with this policy. The procedures should include reference to: safekeeping, master repurchase agreements, wire transfer agreements, banking service contracts and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the City Treasurer.

The Treasurer is responsible for the investment of bond proceeds and special district funds, whether held by the City, a fiscal agent or trustee. The Bond Proceeds and Special District Funds Portfolios shall be segregated from the Irvine Pooled Investment Portfolio of the City and will be structured with maturities (or maintain an average maturity) sufficient to meet construction draws, debt service payments and other short-term liabilities. For purposes of efficiency, the Treasurer may instruct each fiscal agent or trustee to purchase certain securities regarding the investment of bond proceeds and special district funds in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Where present, bond indenture and guiding resolution documentation for investment of bond proceeds and special district funds will supersede the City of Irvine Investment Policy guidelines. The Investment Advisory Committee will be advised of any investments made outside of the Investment Policy, pursuant to bond indentures and/or guiding resolutions.

Currently, management of the Irvine Pooled Investment Portfolio, Bond Proceeds Portfolio, and Special District Funds Portfolio has been delegated to a contract management firm that has full authority to execute investment transactions on behalf of the City. In the event the contract management firm is not able to execute investment transactions, the City Treasurer and Deputy City Treasurer have the authority to execute investment transactions.

4. ETHICS AND CONFLICTS OF INTEREST

Officers and employees involved in the investment process shall refrain from personal business activity that conflicts with proper execution of the investment program or that impairs their ability to make impartial investment decisions. Employees and investment officials shall disclose any material financial interests that could be related to the performance of the City's investment policy annually with the California Fair Political Practices Commission or as necessary under the Political Reform Act and Government Code Section 1090 et seq.

5. PRUDENCE/PRUDENT INVESTOR STANDARD

The Treasurer operates the City's pooled cash investment program under the Prudent Investor Standard, Government Code Section 53600.3, and applicable State laws. When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, the Treasurer shall act

with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the City, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the City. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired and sold as authorized by law. This affords a broad spectrum of investment opportunities so long as the investment is deemed prudent and permissible by the State of California, various bond indentures and this policy. The Treasurer strives to invest 100 percent of idle funds.

6. INTERNAL CONTROLS

The Treasurer and Manager of Fiscal Services shall establish procedures that separate the internal responsibility for management and accounting of the investment portfolios. An analysis by an external independent auditor shall be conducted annually to review internal controls, account activity and compliance with policies and procedures.

7. INVESTMENT OBJECTIVES

The City's cash management system is designed to accurately monitor and forecast revenues and expenditures, thus enabling the Treasurer to invest funds to the fullest extent possible. The Treasurer maintains a diversified portfolio to accomplish the primary objectives in the order of safety, liquidity, and yield.

Safety: The safety/risk associated with an investment refers to the potential loss of principal, accrued interest or a combination of these. The Treasurer seeks to mitigate credit risk by monitoring financial institutions with which he/she will do business, and by careful scrutiny of the credit worthiness of the investment instruments as well as the institutions. Such resources as a nationally recognized statistical-rating organization (NRSRO) services are utilized for this review. The Treasurer seeks to mitigate interest rate risk through diversification of instruments as well as maturities.

Liquidity: The portfolio will be structured with sufficient liquidity to allow the Treasurer to meet anticipated cash requirements. This will be accomplished through the purchase of a diversity of instruments to include those with active secondary markets, those that can match maturities to expected

cash needs, and the State Local Agency Investment Fund (LAIF) with immediate withdrawal provisions.

Yield: A competitive market rate of return is the third objective of the investment program after the fundamental requirements of safety and liquidity have been met. The portfolio shall be managed to consistently attain a market rate of return throughout budgetary and economic cycles. Whenever possible, and consistent with risk limitations and prudent investment management, the City will seek to augment returns above the market average rate of return through the implementation of active portfolio management strategies.

8. PERFORMANCE EVALUATION

Investment performance is continually monitored and evaluated by the City Treasurer. Investment portfolio reports are generated on a monthly and quarterly basis and submitted to the City Council, City Manager, and Investment Advisory Committee. A quarterly Treasurer's report is also presented to the City Council, Finance Commission, and Investment Advisory Committee during respective regularly scheduled meetings.

The investment portfolio reports are to be submitted within 30 days of the end of the reporting period. The monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 6-month CMT (Constant Maturity Treasury) as calculated by the Federal Reserve Bank of New York. As an added reference, the monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 2-year CMT as calculated by the Federal Reserve Bank of New York.

9. DIVERSIFICATION

The City will diversify use of investment instruments to avoid unreasonable risks inherent in over-investing in specific instruments, individual financial institutions, or maturities.

Market price volatility shall be controlled through maturity diversification, as well as ensuring adequate liquidity is available to meet cash flow requirements, thereby precluding the need to sell instruments at a market loss.

Risk of default will be controlled by acquiring instruments such as

Government Securities, or by diversifying the portfolio within the constraints and parameters of Section 17 of this Policy, Authorized and Suitable Investments.

10. PORTFOLIO SEGREGATION

Within the overall funds managed by the Treasurer, bond proceeds and special district funds shall be segregated from the general City pool into their own pool and be invested in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Furthermore, bond proceeds held by fiscal agents or trustees shall also be segregated and invested in accordance with each indenture.

The primary purpose of any separately managed bond proceeds and special district funds portfolios is to structure investment maturities to meet current and future liabilities. The preservation of principal and the maintenance of liquidity are the most important factors regarding the investment of bond proceeds and special district funds. Portfolio yield is not a primary factor since the portfolio structure, eligible investment assets and maturity restrictions are governed by draws and expenditure schedules of the issues. Performance will be based upon maximizing permitted positive arbitrage within the context of principal preservation as a first priority (pre-1986 Tax Reform Act issuances) or minimizing or eliminating negative arbitrage (yield-restricted issues).

11. BOND ISSUANCE ARBITRAGE REBATE

The U.S. Tax Reform Act of 1986 requires the City to perform annual arbitrage calculations and rebate excess earnings to the U.S. Treasury for investment returns that exceed the allowable interest earnings limit of each bond issue. The arbitrage calculation process must be conducted for the investment of proceeds of bond issues sold after the effective date of this law. This arbitrage calculation will be contracted out to provide the necessary technical expertise to comply with this regulation. The City's investment position relative to the interest rate arbitrage restrictions is to have safety and the highest permitted return the law allows as the highest priority while ensuring the preservation of principal and liquidity.

12. QUALIFIED DEALERS

The Treasurer shall transact business only with Registered Investment

Advisors, national or state-chartered banks, savings and loans, and broker dealers. The dealers should be primary dealers regularly reporting to the New York Federal Reserve Bank, or approved regional or secondary market dealers that qualify under the Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule).

The Treasurer may direct a fiscal agent or trustee to execute investment transactions on behalf of the City for funds held by that fiscal agent or trustee.

The City may purchase "prime" quality rated commercial paper from its direct issuer if it presents a higher return than in the secondary market.

The Treasurer will monitor broker/dealers and their firms, to ensure they are in good standing with the appropriate regulatory agencies. The Treasurer will review financials and report back to the Investment Advisory Committee.

13. SAFEKEEPING OF SECURITIES

To protect against losses caused by the collapse of individual securities dealers, all securities owned by the City, including collateral for repurchase agreements, shall be held in safekeeping by a third party bank trust department acting as agent for the City under the terms of a custody agreement or, in the case of funds held by the fiscal agent or trustee, the fiscal agent or trustee shall segregate and report securities held on the City's behalf. Any trade executed by a dealer is required to settle on a delivery versus payment basis with the City's safekeeping agent.

Fiscal agents or trustees in receipt of City of Irvine bond proceeds will settle security transactions on a delivery versus payment method based upon instructions provided by the Treasurer or the City's investment advisor. The fiscal agents or trustees will issue monthly custodian statements evidencing securities held in safekeeping, including the receipt of interest and maturity proceeds, the disbursement of funds for the purchase of securities, and the receipt of any sale proceeds.

14. COLLATERALIZATION

All demand deposits, time deposits and repurchase agreements are to be fully collateralized with securities authorized by the California Government Code and the City.

1. The eligible collateral for repurchase agreements must be those investments authorized by Section 53651 of the California Government Code. The Treasurer may specify the type of eligible collateral for use in repurchase agreements. Eligible collateral must be in book entry form. Collateral is valued at current market plus accrued interest through the date of valuation.

   a. The cost value (book value) of collateral pledged for demand deposits must at all time be equal to or greater than the amount on deposit, plus accrued interest, in accordance with the following ratio:

U.S. Treasury Securities	110%

   b. The cost value (book value) of collateral pledged for repurchase agreements must at all time be equal to or greater than the par amount, plus accrued interest, with the following ratios:

U.S. Treasury Securities	102%
U.S. Government Agencies	102%

2. It is the policy of the City to require reports at least on a quarterly basis from institutions with which the Treasurer has pledged security interest. The Treasurer shall monitor the adequacy of collateralization to ensure that balances are collateralized in accordance with the ratios approved herein.

3. With regard to repurchase agreements, it is the policy of the City to initiate a margin call in the event pledged collateral falls below the appropriate ratio.

4. Collateralized investments and deposits often require substitution of collateral. Any broker or financial institution requesting substitution must contact the City for approval in the event the counterparty to the transaction is not authorized under agreement with the City to make substitutions.

15. MAXIMUM MATURITIES

1. Pooled Investment Portfolio

   In accordance to California Government Code Section 53601, The City will not invest in any securities maturing more than five (5) years

from the settlement date of purchase. If the Treasurer desires to make investments longer than five years, express authority to make those investments, either specifically or as part of an investment program, must be approved by the City Council no less than three months prior to the investment. In no event will securities with maximum maturities beyond four years exceed 40 percent of the portfolio's total carrying cost at the time of purchase.

2. Bond Proceeds Portfolio/Special District Funds Portfolio

The Bond Proceeds and Special District Funds Portfolios held by the City, fiscal agents or trustees will be structured with maturities sufficient to meet current and future disbursements and other liabilities consistent with the purpose of each bond issue. The Treasurer may match maturities to defined future liabilities or may structure the portfolio in such a manner as to maintain an average maturity and a defined liquidity percentage necessary to meet estimated liabilities. In no event will securities be purchased with final maturities that exceed a specifically defined future liquidity requirement (such as bond reserve fund availability requirement) or liability.

16. INVESTMENT POOLS/MONEY MARKET MUTUAL FUNDS

A thorough investigation of any government sponsored pool and/or mutual fund is required prior to investing and on a continual basis. There shall be a questionnaire completed which will provide the following information:

- A description of eligible investment securities, and a written statement of investment policy and objectives.
- A description of interest calculations and how it is distributed, and how gains and losses are treated.
- A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program audited.
- A description of who may invest in the program, how often, and what size of deposits and withdrawals are allowed.
- A schedule for receiving statements and portfolio listings.
- A description of how the pool/fund utilizes reserves, retained earnings, etc.
- A fee schedule, including when and how fees are assessed.
- The eligibility of the pool/fund to invest in bond proceeds and

special district funds, and a description of its practices.

17. AUTHORIZED AND SUITABLE INVESTMENTS

The City is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations and based on the cost at the time of purchase, the following investments are authorized as further limited herein:

Authorized Investment Summary Matrix

Category		Percent
A.	US Treasuries	no limit
B.	US Agencies	no limit
C.	Bankers' Acceptances	25%
D.	Commercial Paper	15%
E.	Repurchase Agreements	25%
F.	Reverse Repurchase Agreements	15%
G.	Local Agency Investment Fund (LAIF)	25%
H.	Municipal Bonds	25%
I.	Corporate Medium Term Notes	15%
J.	Money Market Mutual Funds	20%
K.	Supranationals	10%

A. United States Treasury Bills, Bonds, and Notes, or those for which the full faith and credit of the United States are pledged for payment of principal and interest. There is no limitation as to the percentage of the portfolio that can be invested in this category.

B. Obligations issued by United States Federal agencies or government-sponsored enterprise obligations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. Although there is no percentage limitation on these issues, the "prudent investor" standard shall apply to investments from a single agency.

C. Bills of exchange or time drafts drawn on and accepted by a commercial bank, otherwise known as Bankers' Acceptances. Bankers' Acceptances purchased may not exceed 180 days to maturity or 25 percent of the cost (book) value of the portfolio. No more than $5 million may be invested in Bankers' Acceptances issued by any one bank. Prior to the purchase of any Banker's

Acceptance, the portfolio manager shall review the rating of the issuing bank. Bankers' Acceptances of issuing financial institutions shall have both a short and long term rating in the highest category by at least one nationally recognized rating agency at the time of purchase.

D. Commercial paper ranked of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by NRSRO and issued by a domestic corporation having assets in excess of $500 million. The commercial paper must also have an "A" or better rating for the issuer's debt, other than commercial paper, if any, as provided by a NRSRO. Purchase of commercial paper from corporations on negative credit watch by a major rating agency shall be prohibited. Purchases of eligible commercial paper may not exceed 270 days to maturity. Excluding the Special District Funds Portfolio, purchases of commercial paper may not exceed 15 percent of the cost value of the portfolio at time of purchase, and no more than 3 percent of the cost value of the portfolio may be invested in commercial paper issued by any one corporation. Corporate medium term note and bankers' acceptance holdings shall be considered when calculating the maximum dollar amount in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

E. Repurchase agreements. The City may invest in repurchase agreements with banks and primary dealers with whom the City has entered into a master repurchase agreement that specifies terms and conditions of repurchase agreements. No more than 25 percent of the cost value of the portfolio may be invested in repurchase agreements at any time. The maturity of repurchase agreements shall not exceed 75 days.

The cost value of securities used as collateral for repurchase agreements shall be monitored daily by the Treasurer and will not be allowed to fall below the margin ratios specified in Section 14 (1)(b) of this policy. In order to conform with provisions of the Federal Bankruptcy Code which provides for the liquidation of securities held as collateral for repurchase agreements, the only securities

acceptable as collateral shall be securities that are direct obligations of, or that are fully guaranteed as to principal and interest by, the United States Government such as Treasury bills, Treasury notes or Treasury bonds with less than a five year maturity.

F. Reverse repurchase agreements. The City may invest in reverse repurchase agreements only with those banks and primary dealers with whom the City has entered into a master repurchase agreement outlining terms and conditions of repurchase and reverse repurchase agreements. The City may only invest in reverse repurchase agreements for the following purpose:

1. The City may enter into reverse repurchase agreements when funds obtained through the reverse can be reinvested in a higher yielding security to obtain additional interest income for the City at a spread deemed to be acceptable by the Treasurer under then prevailing market conditions. Reverse repurchase agreements entered into in accordance with this paragraph may not exceed 75 days to maturity and must be matched as to maturity and dollars invested with its corresponding reinvestment. No more than 15 percent of the cost value (book value) of the portfolio may be invested in reverse repurchase agreements.

2. Reverse repurchase agreements may be used for liquidity purposes when it is determined that the portfolio has sufficient additional collateral coming due within the term of the reverse repurchase agreement equal to or exceeding the amount of the reverse repurchase agreement.

G. The City may invest in the LAIF established by the State Treasurer for the benefit of local agencies up to the maximum permitted by State law, but not to exceed 25 percent of the cost value (book value) of the total portfolio excluding the Bond Proceeds Portfolio.

H. Bonds issued by local agencies of the United States, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency or by a department, board, agency, or authority of the local agency rated “AA” or better by a NRSRO. "AA" rated bonds shall be limited to 36 months maximum maturity and "AAA" rated bonds shall be limited to 60 months maximum maturity. No more than 25 percent of the cost value (book value) of the portfolio may be invested in municipal bonds.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

I. Corporate medium term notes issued by a domestic corporation having assets in excess of $500 million and having an "AA" or better rating criteria at time of purchase on its long-term debentures as provided by a NRSRO. Purchase of corporate medium term notes from corporations on negative credit watch by a major rating agency shall be prohibited. "AA" rated medium term notes shall be limited to 36 months maximum maturity and "AAA" rated medium term notes shall be limited to 60 months maximum maturity. The aggregate total of all purchased medium term notes may not exceed 15 percent of the cost value of the portfolio. No more than 3 percent of the cost value of the portfolio may be invested in corporate medium term notes issued by any one corporation. Commercial paper and bankers' acceptance holdings shall be considered when calculating the maximum percentage in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

J. Money market mutual funds having a rating of "AAA" or an equivalent by no less than two NRSRO with no load and maintained at $1 par value. No more than 20 percent of the cost value of portfolio value at time of purchase, excluding the Special District Funds Portfolio, should be invested in this category, and the City's investment in any specific mutual fund will not exceed 2 percent of that mutual fund's total assets.

K. Supranational securities of United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank, with a maximum remaining maturity of five years

or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AAA" or better by an NRSRO and shall not exceed 10 percent of the agency's moneys that may be invested pursuant to this section.

18. INELIGIBLE INVESTMENTS

Investments not described herein including, but not limited to, equity securities such as common stocks, preferred stocks, convertibles, inverse floaters, range notes and interest-only strips that are derived from a pool of mortgages are prohibited from use in this portfolio. The City is prohibited from entering into a margin agreement and/or borrowing on margin.

19. INVESTMENT ADVISORY COMMITTEE

The City has created a five-member Investment Advisory Committee as a standing Committee to advise the City on matters relating to the City's Investment Policy and the investment of City funds. The Committee meets at least quarterly with the Treasurer and City staff and reports directly to the City Council. Each Councilmember appoints one person to the Committee. The Committee member's term is concurrent with the term of the appointing Councilmember. The Committee will be governed by a set of Bylaws (Exhibit A) to be reviewed and approved annually.

20. PORTFOLIO REPORTING

In accordance with California Government Code, Sections 53607 and 53646(b), the Treasurer shall provide on a monthly and quarterly basis (or as otherwise requested by the City Manager) an investment portfolio to the City Council. The report shall include a listing of each of the City's investments (a description that adequately describes the security), the purchase date, maturity date, cost basis, current cost value (book value), interest rate, weighted average maturity, current unrealized loss or gain and a listing of investment transactions that includes purchase/deposit and sale/withdrawal activity. Various investment types will be categorized and grouped in the same structure as the qualified investment categories identified in this policy. The portfolio report shall include a statement certifying the ability of the City to meet its expenditure requirements for the next six months, or provide an explanation as to why sufficient money shall, or may, not be available. The report will also include comments on the fixed income markets and economic conditions, and the effect, if any, on

the portfolio structure and investment strategy. The report shall also detail all repurchase and reverse repurchase positions and associated liabilities.

The investment portfolio report shall include market value information for all investments. A monthly market value will be obtained for each security owned by the City. For purposes of reporting, the market value of each security may be obtained from the City's custodian bank or other pricing source(s) utilized by the City's designated investment management firm (registered investment advisor).

The City shall record interest revenue on a modified accrual basis of accounting that is typical for reporting and recording of interest earnings. Securities held by a fiscal agent or trustee shall also be recorded on a modified accrual basis of accounting. The Treasurer will report year-end investments in conformance with Governmental Accounting Standards Board Statement Nos. 31, 40, and 72.

The Treasurer will provide a monthly reconciliation of all funds included in the investment portfolios. The reconciliation shall utilize all available information including the City's books, the Demand Deposit Bank account, the custodian's statement, and the fiscal agent and trustee's statement.

21. REVIEW OF INVESTMENT PORTFOLIO

The securities held by the City must be in compliance with Section 17, Authorized and Suitable Investments, at the time of purchase. The Treasurer shall review the portfolios quarterly to identify any securities that are no longer in compliance. The Treasurer shall report any major and critical incidences of noncompliance in the quarterly treasurer's report to the City Council and Investment Advisory Committee.

22. INVESTMENT POLICY ADOPTION

The City Council shall review and adopt this Investment Policy by resolution annually.

GLOSSARY

AGENCIES – Agencies of the Federal government set up to supply credit to various classes of institutions (e.g., S&L's, small business firms, students, farmers, housing agencies, etc.) Examples include Federal Home Loan Mortgage Corporation (FHLMC), Federal National Mortgage Association (FNMA), Federal Home Loan Bank (FHLB), and Federal Farm Credit Bank (FFCB).

ASK/OFFER – The price at which securities are offered. (The price at which a firm will sell a security to an investor)

BANKERS' ACCEPTANCE (BA) – A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the issuer.

BASIS POINT – One one-hundredth of a percent (i.e., 0.01 percent)

BEAR MARKET – A period of generally pessimistic attitudes and declining market prices.

BID PRICE – The price at which a broker/dealer will buy securities from an investor.

BOND EQUIVALENT YIELD – The basis on which yields on notes and bonds are quoted.

BOOK VALUE (COST VALUE) – The purchase price of the security as recorded on the City's books.

BROKER – An individual or firm acting as intermediary by purchasing and selling securities for others.

BULL MARKET – A period of generally optimistic attitudes and increasing market prices.

CALLABLES – Securities that the issuer has the right to redeem prior to maturity.

CERTIFICATE OF DEPOSIT (CD) - A time deposit with a specific maturity evidenced by a certificate. Large denomination CD's are typically negotiable.

CMT – Constant Maturity Treasury – An index of the average yield on United States Treasury securities adjusted to a constant maturity.

COLLATERAL – Securities, evidence of deposit or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) - The official annual report of the City. It includes combined statements for each individual fund and account group prepared in conformity with Generally Accepted Accounting Principles (GAAP). It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

CORPORATE MEDIUM TERM NOTE – A security issued by a corporation doing business in the U.S. with a maturity not to exceed five years.

COST VALUE (BOOK VALUE) – The purchase price of the security as recorded on the City's books.

COUPON – a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value; b) a certificate attached to a bond evidencing interest due on a payment date.

DEALER – An individual or firm acting as principal in a security transaction.

DEBENTURE - A bond secured only by the general credit of the issuer.

DELIVERY VS PAYMENT - Delivery of securities with a simultaneous exchange of money.

DEMAND ACCOUNT – An account with a commercial bank from which check withdrawals may be made at any time.

DERIVATIVES – Financial products that are dependent for their value on (or derived from) an underlying financial instrument, a commodity, or an index representing values of groups of such instruments or assets.

DISCOUNT – The difference between the cost price of a security and its par value when the cost is lower than par. A security selling below original offering price shortly after sale also is considered to be at a discount.

DIVERSIFICATION – Dividing investment funds among a variety of securities

offering independent returns.

FEDERAL FUNDS RATE – Interest rate charged by one institution lending federal funds to another.

FEDERAL OPEN MARKET COMMITTEE (FOMC) – Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

FINANCIAL ADVISOR – A firm or bank that acts in a financial advisory capacity with respect to a new issue of municipal securities pursuant to a written contract.

FISCAL AGENT – A financial institution which performs payment of principal and interest to bondholders, and certain administrative duties on the bond issuer's behalf.

GOVERNMENTAL ACCOUNTING STANDARDS BOARD – The independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.

INTERNAL RATE OF RETURN – Rate of return over the life of a security on variables.

LOCAL AGENCY INVESTMENT FUND (LAIF) – The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

MARKET VALUE – The price at which a security is trading, usually the liquidation value.

MASTER REPURCHASE AGREEEMENT – A written contract covering all future transactions between the parties to repurchase-reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

MONEY MARKET MUTUAL FUNDS – Open-ended mutual fund that invests in commercial paper, banker's acceptances, repurchase agreements,

government securities, certificates of deposit and other highly liquid and safe securities, and pays money market rates of interest. The fund's net asset value remains a constant $1 a share, with the interest rate increasing or decreasing.

NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION (NRSRO) – A rating organization designated by the SEC as being nationally recognized.

OFFER PRICE – The price at which a broker/dealer will offer securities to an investor.

OPEN MARKET OPERATIONS – Federal Reserve activity. Under the Federal Reserve Act, the Fed uses purchases and sales of Government and Federal Agency securities to add to or subtract from commercial bank reserves. Goals are to sustain economic growth, high employment and reasonable price stability.

PAPER GAIN OR LOSS – Term used for unrealized gain or loss on securities being held in a portfolio based on comparison of current market quotes and their original cost. This situation exists as long as the security is held while there is a difference between cost value (book value) and the market value.

PORTFOLIO – Collection of securities held by an investor.

PREMIUM – The difference between the cost price of a security and its par value, when the cost is higher than par.

PRIMARY DEALER – A group of government securities dealers that serve as trading counterparties of the New York Fed in its implementation of monetary policy. This role includes the obligations to: (i) participate consistently in open market operations to carry out U.S. monetary policy pursuant to the direction of the Federal Open Market Committee (FOMC); and (ii) provide the New York Fed's trading desk with market information and analysis helpful in the formulation and implementation of monetary policy. Primary dealers are also required to participate in all auctions of U.S. government debt and to make reasonable markets for the New York Fed when it transacts on behalf of its foreign official account-holders.

RATE OF RETURN – The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity; on a bond, the current income return.

REPURCHASE AGREEMENT (REPO) – A holder of securities sells these securities

to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security "buyer" in effect lends the "seller" money for the period of the agreement, and the terms of the agreement are structured to compensate them for this.

REVERSE REPURCHASE AGREEMENT (REVERSE REPO) – A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specific date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

SAFEKEEPING – The service provided by banks and trust companies for clients when the bank or trust company stores the securities, takes in coupon payments, and redeems issues at maturity.

SECURITIES & EXCHANGE COMMISSION (SEC) - Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15(C) 3-1 – See Uniform Net Capital Rule.

SPREAD – a) The yield or price difference between the bid and offer on an issue; b) the yield or price difference between different issues.

SUPRANATIONALS – International institutions formed by two or more governments that transcend boundaries to pursue mutually beneficial economic or social goals. There are three supranational institutions that issue obligations that are eligible investments for California local agencies: the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB).

SWAP – The sale of one issue and the simultaneous purchase of another for some perceived advantage.

TREASURY BILLS – A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months or one year.

TREASURY BONDS – U.S. Treasury securities that have initial maturities of more than 10 years.

TREASURY NOTES – Intermediate-term coupon bearing U.S. Treasury

securities having initial maturities from one year to ten years.

TRUSTEE – A financial institution with trust powers that acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.

UNIFORM NET CAPITAL RULE – Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities. Liquid capital includes cash and assets easily converted into cash.

WHEN ISSUED BASIS (WI) – A term applied to securities that are traded before they are actually issued with the stipulation that transactions are null and void if securities are not issued.

YIELD CURVE – Yield calculations of various maturities at a given time to observe spread difference.

YIELD TO MATURITY – The current coupon yield minus any premium above par, or plus any discount from par in the purchase price with the adjustment spread over the period from date of purchase to maturity.

Exhibit A

BYLAWS OF THE INVESTMENT ADVISORY COMMITTEE OF THE CITY OF IRVINE

ARTICLE I - PURPOSE

The purpose of the Investment Advisory Committee is to oversee the management of the investment portfolio through regular quarterly meetings. The Committee will review investment transactions, discuss economic conditions and strategies regarding the management of the portfolio, and report to individual Councilmembers on the meetings.

ARTICLE II - STRUCTURE

The Committee shall be comprised of five members. Each Councilmember shall be responsible for appointing one member to the Committee with the term of the member running concurrent with the term of the Councilmember making the appointment.

The Chairperson and Vice Chairperson of the Committee shall be elected by a majority vote of the members and shall hold the seat for a one-year term. These positions may be elected for two consecutive terms. At the end of the second consecutive term, the members shall elect a new Chairperson and Vice Chairperson.

ARTICLE III - MEETINGS

The meetings shall be held at least quarterly at Irvine City Hall. Each meeting shall be held prior to the presentation of the quarterly report to Council on the status of the portfolio. Three members of the Committee must be present to constitute a quorum.

ARTICLE IV - PARLIAMENTARY PROCEDURE

The rules contained in the current edition of Robert's Rules of Order, newly revised, shall govern the Committee in all cases to which they are applicable and where they are not inconsistent with these Bylaws.

ARTICLE V - AMENDMENT OF BYLAWS

These Bylaws may be amended by a majority vote of the Committee.

4.5

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: RESOLUTIONS CONTAINING TERMS AND CONDITIONS OF EMPLOYMENT FOR REPRESENTED AND NON-REPRESENTED EMPLOYEES

Director of Administrative Services

City Manager

RECOMMENDED ACTION

1. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

2. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

3. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

4. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

5. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND

SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

6. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

7. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

8. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING FULL-TIME POSITIONS IN ACCORDANCE WITH THE PROVISIONS OF COMPENSATION RESOLUTIONS AND THE OPERATING BUDGET FOR THE 2017-18 FISCAL YEAR, AND SUPERSEDING RESOLUTION NO. 17-45, WHICH IS INCONSISTENT THEREWITH

9. Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING THE SALARY GRADE ORDER STRUCTURE AND SALARY RANGES FOR EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 17-46, WHICH IS INCONSISTENT THEREWITH

EXECUTIVE SUMMARY

The negotiation team for the City has reached tentative agreement on the Memorandums of Understanding (MOUs) with the Associated Supervisory/Administrative Personnel (ASAP), Irvine City Employees Association (ICEA), Irvine Professional Employees Association (IPEA), and Irvine Police Management Association (IPMA). All agreements will be effective August 11, 2017 upon expiration of the previous MOUs.

The terms of the new two-year agreements provide for base salary increases in each year of the contracts.

Other recommended actions include: adoption of resolutions for non-represented full-time employees providing the same changes in terms and conditions of employment as those provided for the represented employees; updates to the resolution covering part-time employees; and updates to the Salary Grade Order and Position Control resolutions.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The negotiating team for the City and representatives of ASAP, ICEA, IPEA, and IPMA bargaining units reached tentative agreements on terms and conditions of employment. These tentative agreements have been ratified by the bargaining unit membership and MOUs reflecting those agreements are now pending approval by the City Council (Attachments 1-4).

- The term of each proposed MOU is two years, effective August 11, 2017 through June 30, 2019. They provide two percent base salary increases in each of the two years.

- The agreements with ASAP, ICEA and IPEA provide for a paid Holiday Leave Benefit of three days.

- The agreement with IPMA provides for a City contribution of 1.25 percent of base salary towards a retiree health savings account.

- All agreements include minor modifications in terminology and procedure that reflect current law and practice.

- Resolutions governing the terms and conditions of employment for non-represented full-time employees contain the same provisions as the MOUs for non-sworn employees (Attachments 5-6).

- The resolution governing terms and conditions of employment for part-time employees provides for a two percent base salary increase in each of the two years and paid Holiday Leave Benefit of three days for extended part-time staff (Attachment 7).

Other recommended actions include revision of the Salary Grade Order resolution and revision of the Position Control resolution to reflect recent changes in position classification, allocation or title since adoption of the 2017-2018 budget (Attachments 8-9).

ALTERNATIVES CONSIDERED

The City is required by the State's labor-relations law (Meyers-Milias-Brown Act) to meet and confer in good faith with recognized employee organizations. The terms of the proposed MOUs reflect agreements reached by the parties through the meet-and-confer

process. The City Council may choose not to approve the agreements; however, the tentative agreements reached with ASAP, ICEA, IPEA, and IPMA representatives are within the parameters set by the City Council and have been ratified by the membership of each group.

FINANCIAL IMPACT

The cost of implementing the recommended MOUs and resolutions for all City employees is $1,883,000 for Fiscal Year 2017-18 and $1,907,500 in Fiscal Year 2018-19. Staff will try to manage budgeted resources within this year's adopted budget to adjust to the $948,000 cost of salaries and benefits that were not included in the budget. This increased cost represents 0.5 percent of the adopted budget. If additional funding is needed, staff will bring back a mid-year budget adjustment for City Council consideration.

REPORT PREPARED BY Brian King, Human Resources Manager

ATTACHMENTS

1. Resolution Adopting ASAP MOU
2. Resolution Adopting ICEA MOU
3. Resolution Adopting IPEA MOU
4. Resolution Adopting IPMA MOU
5. Confidential Resolution
6. Management and Non-Represented Resolution
7. Part-Time Resolution
8. Position Control Resolution
9. Salary Grade Order Resolution

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE ASSOCIATED SUPERVISORY/ ADMINISTRATIVE PERSONNEL (ASAP), AND SUPERSEDING ALL PREVIOUS ASAP MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Associated Supervisory/Administrative Personnel (ASAP) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and ASAP have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and ASAP was adopted by the City Council pursuant to Resolution No. 15-74.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and ASAP is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 1

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

ASSOCIATED SUPERVISORY/ADMINISTRATIVE PERSONNEL

AND

CITY OF IRVINE

AUGUST 11, 2017 – JUNE 30, 2019

EXHIBIT A

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Article 1 – Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq.) and City Resolution No. 341, for the purpose of memorializing the Agreement reached between the City and Associated Supervisory/Administrative Personnel (ASAP) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation, and understanding between the City and its employees.

Article 2 – Recognition

ASAP is hereby acknowledged as the exclusive Recognized Employee Organization representing the full-time employees in the classifications listed in Attachment I (Supervisory/Administrative personnel).

Article 3 – Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation, and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the ASAP. Further, the purpose of this Agreement is to guarantee employees represented by ASAP all rights and privileges of employment provided in Federal and State law, and City ordinances.

Article 4 – Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement, provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer, and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend, or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

Employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3502. Neither the City nor ASAP shall interfere with, intimidate, restrain, coerce, or discriminate against employees who exercise their rights under this Agreement or the law.

Article 7 - Association Rights

ASAP shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members and Departmental Representatives.

The City shall provide ASAP, if changes occur, with the following: A list of employees in the classifications set forth in Attachment I; the names of new hires, promotions, and terminations in the classifications set forth in Attachment I; City of Irvine job postings; and copies of current salary schedules. The City will provide ASAP with names and home addresses of all ASAP-represented employees. This information is for the confidential use of ASAP and the City shall not be responsible and will be held harmless by ASAP for inappropriate release of this

information by ASAP. Upon written request, the ASAP shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of ASAP to post notices relating to matters of interest to ASAP and to the employees.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

Designated ASAP representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of attending meetings called by Management or to participate in established City committees, such as but not limited to, Citywide Insurance Committee, Defined Contribution Pension Plan Committee and Safety Committee.

Designated ASAP representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances. Grievances shall be processed in accordance with the Personnel Rules and Regulations unless noted herein.

ASAP representatives may have access to ASAP members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work. In order to allow ASAP an opportunity to handle the business affairs of its members, the City shall, at the beginning of the calendar year, establish a time bank of one-hundred and eighty (180) hours to be used by board members as authorized by the ASAP Board for training, grievances, board meetings, etc. ASAP agrees the effective operation of the City departments is not to be adversely affected by the use of the time bank by ASAP members. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings, and/or attendance at special meetings called by the City shall not be charged against the time bank.

At the orientation of new employees, a City-approved ASAP informational packet will be provided to those who would be eligible to join ASAP. In addition, ASAP and/or its representative will be provided with the opportunity to have 10-minute access to employees in ASAP-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by ASAP under the authority of a membership application signed by each participating employee which shall be approved by ASAP and remitted promptly to the Payroll Office.

Article 9 - Quarterly City-ASAP Meetings

The City's designated management staff shall meet with the ASAP President, representative and ASAP board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to resolve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary actions in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Salary

A. Position Classification to Salary Grades

The classification of individual positions to pay grades is the City's sole responsibility and will be based upon the Human Resources' evaluation of the classification using a point factor system.

B. Classification Requests

During the period designated by Human Resources each year, an employee may request a reevaluation of position responsibilities by submitting a new Comprehensive Position

Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's Department Director and manager (if applicable) will review the request and make a recommendation, which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1 of the following fiscal year.

C. Pay Progression in a Salary Grade

Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay progression will be provided according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or Equal to Maximum Range		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

1. Probationary Merit Reviews

   Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary period. All subsequent performance reviews will be conducted according to the same merit schedule as other regular employees. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

D. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

E. Severance

In the event a member of the ASAP bargaining unit is laid-off from his/her employment with the City, without the opportunity to voluntarily demote into a lower position or transfer into a comparable position, due to the contracting-out of a City service, the City will provide a severance. The severance will be equivalent to forty (40) hours of pay, at their current base hourly rate of pay, for every year of full-time City service, rounded to the nearest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual's current elected coverage levels and insurance providers, payable through the end of the month in which severance expires.

Article 11 - Bilingual Pay

Department Directors shall annually designate which positions should be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

   An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

Article 12 – Benefits

The City will provide a cafeteria-style benefit program for supervisory/administrative employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

1. Employees not claiming dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

   Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

B. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions:

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, he total cost to the City for medical, dental, psychological, and vision insurance shall not exceed $694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by

the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

C. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XIII, item B., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XIII, item B., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

D. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential impacts from or modifications to the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and ASAP.

E. Insurance Committee

The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with claims history, and with proposed changes in rates or coverage.

F. Pension

1. CITY OF IRVINE DEFINED CONTRIBUTION PENSION PLAN:

The provisions of this Section F. shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

a. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Employees shall become fifty percent (50%) vested in such plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

b. The City will deduct an amount equal to 6.552 % of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elected to remain in the City of Irvine DCPP.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present or future, as provided under section F of this article. Employees, who elected to remain in the City of Irvine DCPP, shall continue participation until the employee terminates his/her employment from the City for any reason.

d. The City will utilize retirement plan forfeitures to offset the cost of City of Irvine DCPP account management and administrative fees.

2. CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM PLAN (CALPERS):

The provisions of this section F shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program and employees hired after that date.

a. The City's contract with CalPERS shall include the following options:
   i. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   ii. One Year Final Compensation (Cal. Govt. Code Section 20042)
   iii. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost
   iv. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
   v. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
   vi. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

b. All employees hired on or after the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Article XIII, Section F

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule shall apply (Cal. Govt. Code Section 21060).

f. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.

g. Effective April 14, 2012 the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

h. All "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Voluntary Employee's Beneficiary Association (VEBA), which shall be established and administered by the Association.

2. Employees participating in the ASAP VEBA shall contribute an amount equal to one percent (1%) of base salary.

3. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

4. The City will allow for a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of the retired employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

5. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves

to another representation unit, the City will contribute an amount up to the contribution established for the new units' retiree health plan and the employees will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to the current full year's base salary rounded up the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated on 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to Job Share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129.

Article 13 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Directors to make an informed decision and a summary of how necessary coverage and current service levels will be improved or maintained. Approved alternate

work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences that are in excess of one week.

In an emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require that the employee work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a 14-calendar day notice. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered on a case-by-case basis.

Article 14 - Annual Physical Examination

The City shall reimburse employees up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 15 - Leaves

A. Vacation

Employees shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	3 weeks (120 hours)	5 weeks (200 hours)
After 3 through 10	4 weeks (160 hours)	6 weeks (240 hours)
After 10 or more	5 weeks (200 hours)	7 weeks (280 hours)

When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay. The dates an employee may take his/her vacation shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more holidays as defined in this MOU fall within a vacation leave, such holidays shall be charged as a holiday.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if:

Employees must notify their supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave, whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave. The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay at the time of cash out. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month. Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or the designated department contact prior to or the time set for beginning his/her daily duties, or as may be specified by the director of his/her department. When absence is for one (1) work day or more, the employee may be required to file a physician's certificate with the Personnel Officer.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Manager.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

D. Personal Sick Leave Conversion

Regular employees shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused Personal Sick Leave in excess of one-hundred and sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of Personal Sick Leave, except that employees with at least ten years of full-time consecutive service shall be eligible to convert sick leave at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One-hundred and sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave credits to vacation hours.

Regular full-time employees having less than ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 180 hours of sick leave per employee per year. Regular full-time employees with at least ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 120 hours of sick leave per employee per year. Conversion requests can be made only in whole hour increments that are evenly divisible by the conversion ratio, subject to a sixty (60) hour maximum after conversion. Conversion requests shall be submitted on appropriate forms as determined by the Personnel Officer. The annual election period and payment period shall be designated and announced by Administrative Services annually.

A regular full-time employee with less than ten (10) years or more continuous service may convert any accrued and unused sick leave to vacation hours at a ratio of 3 to 1 at the normal base rate of pay. A regular full-time employee who has a minimum of ten (10) years or more of full-time continuous service may convert any accrued and unused sick leave to vacation hours at the ratio of 2 to 1 at the normal base pay rate. In this situation, the employee may exceed his/her vacation accrual limits. This paragraph shall not apply to employees who separate due to termination for cause; or who resign or retire in lieu of being terminated after he/she has received a notice of intent to terminate for cause.

E. Personal Leave

Effective the pay period which includes January 1st of each year employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the pay period which includes January 1, employees have any of this leave on the books, with the first full pay period beginning in January, they will be provided with whatever amount of leave is necessary to bring their bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year.

The immediate family shall be defined as the spouse, registered domestic partner, children, step children, parents, brothers, sisters, step siblings, grandparents,

grandchildren, parents-in-law, grandparents in law or other individuals whose relationship to the employee is that of a dependent or a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee or a person who had an *in loco parentis* relationship with the employee (the employee stood *in loco parentis* to the person.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed one-hundred and eighty (180) calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child to the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Jury Duty

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If unit members are required to be absent from work to report for jury duty, they will notify their supervisor of the absence as soon as possible after finding out that they must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

Employees who are scheduled for a swing or graveyard shift on a day they are called to jury service will be authorized to change their work hours in order to report to jury service.

Employees who are called to jury duty will not be subject to working their full graveyard or swing shift if there is not a minimum of 10 hours before or after assigned jury duty. If there is less than 10 hours between the end of a shift and the start of jury duty, employees will be permitted to leave their shift early to allow for a minimum break of 10 hours. If there is less than 10 hours between the end of jury duty and the start of their shift, employees will be able to delay their usual start time to ensure a 10 hour break in between. In this event, the employee's usual end time will remain the same. For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

I. Military Leave

Employees shall be entitled to such benefits as are provided in state and federal law. An employee requesting such military leave shall present a copy of his/her military orders to his/her Department Director prior to the beginning of the leave.

J. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

2. The employee shall accrue sick leave or vacation leave during the time the employee is receiving Industrial Accident Salary Continuance ;

3. The employee's condition is not permanent and stationary as determined by the City appointed physician.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

K. Administrative Leave

Effective the first pay period beginning in January of each year, employees will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for supervisory/administrative employees appointed during the calendar year. The dates an employee may take his/her administrative leave shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not accrue from year to year nor be paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the pay period which includes January 1, employees have any of this leave on the books, with the first full pay period beginning in January, they will be provided with whatever amount of leave is necessary to bring their bank up to 40 hours,

L. Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

Article 16 – Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day After Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

Regular full-time employees shall receive nine (9) hours pay for holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays.

If a holiday falls on an employee's regularly scheduled day off, the employee will receive holiday pay for the holiday or may take off another day during the pay period with approval of his/her supervisor.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of premium overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted paid time off, in lieu of pay, within the pay period in which the holidays fall. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees will be provided with three days of paid leave to be used in the pay period(s) that include the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated "Holiday Leave" days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

For years subsequent to 2018:

Administrative Services will designate and announce the dates on which the above referenced "Holiday Leave" days shall be observed.

Article 17 - Educational Reimbursement/Professional Development

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, hotel and meal expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

Article 18 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least twenty-four (24) hours in advance, with Human Resources staff.

A copy of any commendations, written warnings or reprimands, disciplinary actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee. The employee shall have an opportunity to respond in writing to documents placed in the file. This response will be filed with the original document.

Written reprimands shall be retained at least one (1) year. If after one (1) year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 19 - Non Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under State, or Federal law governing employment or equal employment opportunity. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and the right to join ASAP.

Article 20 - Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and

effect. Should any change be made in any State or Federal law, or in an rules and regulations implementing such legislation, or in any City Charter provision which would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The parties hereto shall meet-and-confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 21 - Completion of the Meet and Confer Process

Each of the parties hereto agrees that it has had a full and unrestricted right to meet, advance, and discuss all matters properly within the scope of meet-and-confer, in accordance with State laws and local ordinances and regulations. The express provisions of this Agreement constitute the only limitations upon the City's right to determine, implement, supplement, change, modify or discontinue in whole or in part any term or condition of employment the City deems fit and appropriate; provided, however, that the City shall comply with all Federal and State laws relating to employee rights, opportunities, and benefits.

Article 22 – Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of August 11, 2017.

CITY OF IRVINE	ASSOCIATED SUPERVISORY/ ADMINISTRATIVE PERSONNEL
By _____	By _____
By _____	By _____
By _____	By _____
By _____	By _____
	By _____

ATTACHMENT I
CLASSIFICATIONS REPRESENTED BY
ASAP

POSITION TITLE	PAY GRADE
Administrative Coordinator	9
Animal Care Administrator	16
Animal Care Center Supervisor	12
Animal Care Volunteer Program Supervisor	12
Animal Services Supervisor	12
Applications/Programmer Analyst	14
Aquatics Supervisor	12
Assistant City Clerk	14
Assistant City Engineer	18
Building Inspection Supervisor	14
Business Administrator	17
Business Services Administrator	16
Buyer	9
Capital Improvement Program Administrator	18
Code Enforcement Supervisor	14
Communications Bureau Supervisor	14
Community Development Project Administrator	19
Community Services Administrator	18
Community Services Superintendent	16
Community Services Supervisor	12
Construction Inspection Supervisor	14
Crime Analyst	11
Deputy Building Official	19
Emergency Management Administrator	16
Environmental Programs Administrator	18
Executive Coordinator	10
Executive Secretary	9
Facilities Construction Administrator	16

Facilities Maintenance Superintendent	17
Facilities Maintenance Supervisor	12
Finance Administrator	16
Finance Officer	18
Fleet Services Superintendent	17
Fleet Services Supervisor	12
FOR Families Specialist	10
Forensic Supervisor	14
GIS Supervisor	16
Great Park Project Administrator	18
Great Park Property Administrator	18
Information Technology Administrator	20
Landscape Maintenance Superintendent	17
Landscape Maintenance Supervisor	12
Management Analyst I	11
Management Analyst II	13
Media Services Coordinator	11
Municipal Records Administrator	14
Neighborhood Services Administrator	18
Open Space Administrator	16
Permit Services Supervisor	14
Press Information Officer, IPD	16
Principal Plan Check Engineer	18
Principal Planner	17
Project Development Administrator	18
Public Information Officer	16
Public Safety Records Supervisor	11
Public Safety Technology Analyst	14
Public Safety Traffic Programs Supervisor	11
Public Works Administrator	18
Purchasing/Contracts Administrator	16
Real Property Administrator	18
Regulatory Affairs & Business Desk Supervisor	12
Senior Buyer/Contracts Coordinator	11
Senior Crime Analyst	13
Senior Management Analyst	15

Senior Media Services Coordinator	13
Social Services Supervisor/Counselor	12
Special Programs Administrator	16
Street Maintenance Superintendent	17
Street Maintenance Supervisor	12
Supervising Information Specialist	11
Supervising Traffic Systems Specialist	12
Supervising Transportation Analyst	15
Supervisor of Accounting Services	14
Transit Programs Administrator	16
Treasury Specialist	11
Veterinary Practice Manager	12

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE CITY EMPLOYEES ASSOCIATION (ICEA), AND SUPERSEDING ALL PREVIOUS ICEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine City Employees Association (ICEA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and ICEA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the ICEA was adopted by the City Council pursuant to Resolution No. 15-75.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and ICEA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 2

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE CITY EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

EXHIBIT A

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MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE CITY EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 to June 30, 2019

Article 1 - Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq) and City Resolution No. 341, for the purpose of memorializing the Agreements reached between the City and Irvine City Employees Association (ICEA) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation and understanding between the City and its employees.

Article 2 - Recognition

ICEA is hereby acknowledged as the exclusive Recognized Employee Organization representing the employees in the classifications listed in Attachment I (Full-time**,** hourly, non -sworn, non-confidential employees).

Article 3 - Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the ICEA.

Article 4 - Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement; provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; and (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

The City shall not hinder, interfere, intimidate, restrain, discriminate, coerce, or discipline any employee for exercising any rights or benefits provided in this Agreement or law.

Article 7 - Association Rights

ICEA shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members, and Departmental Representatives. The City shall provide ICEA on a monthly basis, if changes occur, with the following: A list of employees in the classifications set forth in Attachment 1; the names of new hires, promotions, and terminations in the classifications set forth in Attachment 1; City of Irvine job postings; and copies of current salary schedules. On a quarterly basis, the City will provide ICEA with names and home addresses of all ICEA-represented employees. This information is for the confidential use of ICEA and the City shall not be responsible and will be held harmless by ICEA for inappropriate release of this information by ICEA. Upon written request, the ICEA shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of ICEA to post notices relating to matters of interest to ICEA and to the employees. Areas will include the employee lounge, one locked bulletin board at the Operations Support Facility, and one coffee/copy center in each major department.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

A designated ICEA representative shall be entitled to leave his/her work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances.

ICEA staff may have access to ICEA members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work.

In order to allow the Association an opportunity to handle the business affairs of its members, the City shall, at the beginning of each calendar year, establish a time bank of 220 hours to be used by board members as authorized by the Association president, for training, grievances, board meetings, etc. The Association agrees the effective operation of the City departments are not to be adversely affected by the use of the time bank by the association members. No overtime will be paid for an employee to fill in for another using the time bank. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings and/or attendance at special meetings called by the City shall not be charged against the time bank.

The City shall allocate office space to ICEA in the Civic Center at no cost to ICEA. At the orientation of new employees, a City-approved ICEA informational packet will be provided to those who would be eligible to join ICEA. In addition, ICEA and/or its representative will be provided with the opportunity to have 10-minute access to employees in ICEA-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by ICEA under the authority of a membership application signed by each participating employee, which shall be approved by ICEA and remitted promptly to the payroll office.

Article 9 - Quarterly City-ICEA Meetings

The City's designated management staff shall meet with the ICEA President, representative and ICEA board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to solve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary action in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by

mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Complaint Resolution Procedure

A. Purpose

To enhance communications between employees and supervisors and management by providing employees a process for the review of complaints or concerns not covered by the grievance process within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Complaint Resolution Procedure

A complaint may be filed for alleged violation of any personnel rule or regulation not grievable under Article XI Grievance Procedure or alleged unfair treatment of an employee. Complaints involving alternative work schedules or promotional recruitments would appropriately fall under this procedure.

C. Complaint Resolution Procedure

Any complaint or concern not covered by the grievance process shall be resolved as follows:

1. The employees shall first attempt to resolve the matter with his/her immediate supervisor within seven (7) calendar days from the date the employee had notice of the action that he/she believes constitutes a complaint.

2. In the event that the immediate supervisor does not resolve the matter to the employee's satisfaction within fourteen (14) calendar days of the employee's presentation of the matter, then the employee may bring the matter to the attention of the next level of authority (i.e., the immediate supervisor’s direct supervisor) within fourteen (14) calendar days of the receipt of response from the immediate supervisor.

3. If the next level of authority does not resolve the matter to the employee's satisfaction within fourteen (14) calendar days of the employee's presentation of the matter then the employee may bring the matter in writing to the attention of the Department Director, within fourteen (14) calendar days of receiving a response.

4. If the complaint is not resolved by the Department Director to the satisfaction of the employee within fourteen (14) calendar days of the Department Director's receipt of the written complaint, the employee may request in writing, review of the complaint by the City Manager's office. The employee shall present his/her complaint in writing, summarizing efforts to resolve the complaint and a copy of the Department Director's response. The City Manager shall consider the matter and make a final decision.

5. In the case of an incident of serious unfair treatment of an employee, which is not resolved through the Complaint Resolution Procedure, the employee may file a formal grievance with his/her department director within appropriate time frames.

Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 11 - Grievance Procedure

A. Purpose

The purpose of the grievance procedure is to enhance communications between employees and employer by providing a fair and impartial review and consideration of grievances within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Grievance Procedure

A grievance may be filed by an employee for the alleged violation of any personnel rule or regulation related to mandatory subjects of bargaining and not specifically reserved to the City in the City Rights Clause, Article V; for the alleged violation of a section of this Agreement; or alleged violation of commonly accepted safety practices or procedures, or a dispute over an annual performance evaluation rating received by an employee with an overall rating of needs development, or unsatisfactory. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations or in lieu of the Complaint Resolution Procedure - Article X. It shall not be used in matters resulting from disciplinary action or other appeal procedures that exist in accordance with the Personnel Ordinance and Resolution.

Any matter being grieved by an employee will be kept confidential by immediate supervisors and higher-level authorities except in conjunction with the investigation of the grievance.

C. Informal Grievance Adjustment

An employee who believes an alleged violation of matters subject to the grievance process has occurred shall first be required to exhaust the informal grievance level prior to filing a formal grievance. The employee shall have fourteen (14) calendar days from the date the employee had notice of the alleged violation that he/she believes constitutes a grievance.

The informal grievance level shall consist of the employee verbally informing his/her immediate supervisor, or next higher level of supervision if the employee's grievance is with that supervisor, of the alleged violation. The supervisor to whom the verbal grievance is made shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days. Any matters for which he/she does not have authority to make a decision should be brought to the attention of a higher-level supervisor who does have the proper authority.

If the employee is not satisfied with the decision reached through the informal discussion, he/she may bring the matter to the attention to the next level of authority (i.e., the immediate supervisor's direct supervisor) within fourteen (14) calendar days of the immediate supervisor's response. The next level of authority shall have fourteen (14) calendar days to reply. If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply.

In incidents involving disputes of the Agreement with an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal.

D. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in Agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing (Form No. 20-33) to their Department Director, with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee). The Department Director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievance is not satisfied with the decision at the Department Director level, the grievant may appeal the decision to the Assistant City Manager or his/her designee, within fourteen (14) calendar days of receipt of

the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at a previous level, and a clear, concise statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the Department Director.

The Assistant City Manager or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Assistant City Manager may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Assistant City Manager, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration Procedure

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Assistant City Manager's decision to submit a request in writing to the Assistant City Manager for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitration which shall be provided for hereinafter. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service (SMCS) to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The order of striking shall be determined by mutual agreement or flipping a coin

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees for witnesses and conferees, or the costs for witnesses and conferees, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issue and the arbitrator's decision on arbitrability cannot be challenged by the City or overturned.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City Policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days to all parties the written findings and advisory recommendations that he/she has prepared.

The City Manager shall have the authority to accept the recommendation of the advisory arbitrator in whole, or in part, or reject the recommendation entirely and formulate his/her own decision on the grievance. The decision of the City Manager shall be provided to all parties within thirty (30) calendar days.

The City Manager has the power to render a final decision of a grievance, which shall be binding on all parties. If, upon review, the City

Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision.

b. City Manager Review

If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Assistant City Manager's decision, may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

E. General Conditions

1. A formal grievance on interpretations/actions of this Agreement, not involving a specific supervisor or Department Director may be submitted directly to the Personnel Officer or his/her designee. The decision of the City Manager on Agreement disputes shall not restrict an employee from other avenues of appeal available under law.

2. The Personnel Officer shall receive and retain copies of all written material pertaining to the grievance.

3. At any step of the informal grievance adjustment or formal grievance procedure, a Department Director, supervisor, or employee may request a representative of the Human Resources Office to participate in any discussion which may take place.

4. Grievance may be initiated only by the concerned employee or group of concerned employees or ICEA.

5. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

6. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, it shall be assumed that the grievance has been settled on the basis of the last decision reached.

7. If management fails to respond within any of the time limits specified in this policy; the employee may proceed to the next level as if management responded on the last day possible.

8. Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 12 - Disciplinary Action

A. Disciplinary Authority

The Department Director shall have the right, with reasonable cause, to demote, dismiss, reduce in pay or accrued leaves or suspend without pay for up to thirty (30) calendar days any regular (i.e., passed probation) member of the unit.

B. Disciplinary Procedure

Upon determination that some form of discipline should be imposed upon an employee, the Department Director or his/her designee shall provide the employee with written notice, which includes the components listed below.

1. The proposed action to be taken.

2. The charges on which the proposed action is based, including all relevant written materials, written reports, and documents which support these charges.

3. The proposed date on which the disciplinary action will take place.

4. The fact that the employee is entitled to respond to the charges either orally or in writing to the Department Director at least seven (7) calendar days after receipt of notification. If the written notice has been issued by the Department Director, the employee may direct his/her response to the Personnel Officer. Failure of the employee to make a written or oral response of request will constitute waiver of the right to respond.

5. If the employee elects to respond in person, a meeting shall be conducted at which the employee shall be given the opportunity to respond to the charges. The meeting shall be held by the Department Director or the Personnel Officer in those instances where the written notice has been issued by the Department Director. The employee shall be entitled to be represented by counsel or other person of his/her choosing during the course of the above proceeding.

6. After following the above procedure, the Department Director shall prepare the written notice of decision to be served personally upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The City shall have the right to place any employee on paid administrative leave pending investigation and processing of any potential disciplinary action. The provisions of this Article shall not apply to reductions in pay that are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal

When formal disciplinary action of dismissal, demotion, reduction in pay, accrued leaves or suspension without pay for three (3) or more days has been taken pursuant to this Article, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or accrued leaves or suspended without pay for three (3) or more days may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

3. Hearing Procedure

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary action imposed pursuant to this Article. In case of termination, however, the Association may request a Hearing Officer be selected from a list provided by the State Mediation and Conciliation Service (SMCS). The parties shall request the SMCS to supply a panel of seven (7) names of persons experienced in hearing disciplinary cases for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Hearing Officer. The order of striking shall be determined by mutual agreement or flipping a coin. The Hearing Officer will not be an employee of the City of Irvine. If the Association requests a Hearing Officer from the SMCS, the costs of the Hearing Officer's services shall be equally divided by the Association and the City.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The Department Director shall first present his/her witnesses and

evidence to sustain the charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the Department Director and the employee, or their respective designees, may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other relevant records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charge the Hearing Officer sustains or does not sustain and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee. However, in the event the City rejects the recommendation of the Hearing Officer to reverse a termination decision, the City will bear the entire costs of the Hearing Officer.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

4. Appeal Procedure for Suspensions of Less Than Three (3) Days and Reductions of Accrued Leaves Equivalent to less than Three (3) Days

a. A member of the unit who has received a reduction of accrued leaves of less than three days (3) or who has been suspended without pay for less than three (3) days, may appeal to the Department Director, or in the event the discipline has been issued by the Department Director, the Personnel Officer within seven (7) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing.

b. Hearing Procedure:

- At least seven (7) calendar days prior to the hearing, both parties shall provide a list of witnesses and/or exhibits to the Department Director or Personnel Officer.
- During the hearing, the Department Director or Personnel Officer shall hear and consider the evidence, witnesses, and/or exhibits from both parties.

- The Department Director or Personnel Officer may grant a continuance for any reason he/she believes to be important to reaching a fair decision.

- The Department Director or Personnel Officer shall consider all evidence and shall base his/her findings on the preponderance of evidence. He/she shall render his/her decision as soon as possible after the conclusion of the hearing, but in no event later than fourteen (14) calendar days after conducting the hearing, unless agreed to by the parties.

- The Department Director or Personnel Officer's decision shall be final and binding.

5. Mediation Procedure

In cases of dismissal, after the parties have selected a Hearing Officer and hearing date as provided above, the parties may, by mutual agreement, request non-binding mediation to resolve the dispute prior to arbitration. The selection of the mediator shall be made by mutual agreement. The costs of the mediator services shall be equally divided by the Association and the City.

D. Dismissal

Dismissal of any employee shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

E. Polygraph Examination

In reference to this provision, no disciplinary action shall be taken against an employee refusing to submit to a polygraph examination; nor shall any comment be anywhere recorded indicating that an employee offered to take, took or refused to take a polygraph examination unless otherwise agreed to in writing by the parties; nor shall any testimony or evidence of any kind regarding an employee's offer to take or refusal to take, or the results of a polygraph examination, be admissible in any proceeding pursuant to this Agreement, unless otherwise agreed to in writing by the parties.

Article 13 - Maintenance of Benefits

It is the understanding of the parties that the wages, hours and other terms and conditions of employment contained in this Agreement will not be reduced and shall remain in full force and effect during the entire term of this Agreement; except as expressly provided herein or except by mutual agreement.

Article 14 - Salary

A. Salary Grade Structure: The City of Irvine's Salary Grade Structure, which includes the classifications represented by the Association in this unit, is included as Attachment I.

B. Position Classification to Salary Grades: The classification of individual positions to pay grades is the City's sole responsibility and will be based upon the Human Resources' evaluation of the classification.

C. Classification Requests: During the period designated by Human Resources each year, employees may request a re-evaluation of the position's responsibilities by submitting a new Comprehensive Position Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's Department Director, manager (if applicable) and supervisor will review the request and make a recommendation which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1st.

D. Pay Progression in a Salary Grade

1. Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay

grade. Base pay progression will be provided according to the following schedule:

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Unsatisfactory or Needs Development	0%
Less than Maximum	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or equal to Maximum		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

2. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary period. All subsequent performance reviews will be conducted according to the Annual Performance Appraisal schedule. If the probationary appraisal has been completed

within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

Employees in the following classifications shall have a probationary period of one (1) year of actual and continuous service and shall receive a probationary merit review at six months following their start date of their probationary period.

Public Safety Dispatcher I/II
Public Safety Assistant
Senior Public Safety Assistant
Forensic Specialist I/II
Civilian Investigator I/II
Police Recruit
Supervising Public Safety Dispatcher

3. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Article 15 - Special Assignment Pay

A. Bilingual Pay

Department Directors shall annually designate which positions are assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

1. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

2. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

3. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving bilingual pay.

4. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November.

5. An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

B. "Hazard" Stipend

1. Employees who work in arterial roadways shall be paid additional compensation of $900 per year. This payment shall be made annually, following implementation of each affected employee's annual performance appraisal, but no later than the pay period that includes December 1 of each year. This payment shall be prorated for an employee who is on leave without pay for 30 days or more. Employees are only eligible to receive this payment if they have met the following requirements:

- Are regularly assigned to one of the following City sections in either the Street Maintenance or Landscape Maintenance Divisions in the Public Works Department:
  - Asphalt
  - Traffic Safety
- Are actively employed by the City at the time of payment.
- Received no less than an "accomplished standards" rating on their performance appraisal that year.
- Received no suspension for safety issues during the previous review period, and had no confirmed positive test results through the DOT testing program during the course of the prior calendar year.
- Followed all WATCH manual and CalOSHA standards, if applicable, during the previous review period.
- Held a position in one of the qualifying sections (asphalt, traffic safety) for at least nine (9) out of twelve (12) months that year.
- Employees receiving this Hazard Stipend are not eligible for the Class A/B License Stipend outlined in Section D of this Article.

C. Training Pay

1. If an employee in the classification of Public Safety Dispatcher II is required to train a new employee in the classification of Public Safety Dispatcher I or II, or Public Safety Aide/Assistant acting in the capacity of call-taker in dispatch, that employee shall be paid additional compensation of $75 for each pay period that employee is required to train. Employees are only eligible to receive this pay if they have met the following requirements:
   - Have been POST-certified as Dispatch trainers through the POST Communications Training Officer course.
   - Actual training time must be performed during that pay period.

2. Neither "sit-alongs" nor Communications Training Officer (CTO) meetings qualify the employee for Training Pay.

D. Class A/B License Stipend

Employees whose regular responsibilities require them to participate in the Department of Transportation's (DOT) drug and alcohol testing program, shall be paid additional compensation of $900 per year. This payment shall be made annually, no later than the pay period that includes December 1 of each year. Employees are only eligible to receive this payment if they have met the following requirements:

- Received no suspension for safety issues during the previous review period, and have no confirmed positive test results through the DOT testing program during the course of the prior calendar year.
- Held a position that required DOT testing program participation for at least nine (9) out of twelve (12) months that year.
- Employees receiving this Class A/B License Stipend are not eligible for the Hazard Stipend outlined in Section B of this Article.

This payment is to recognize the impact of random drug and alcohol testing on employees. If the DOT changes its requirements for testing in the future, such that employees would not be subject to random testing, this payment shall cease.

E. Shift Differential

Employees who have been regularly assigned to a standard shift that requires them to work between the hours of 6:00 p.m. and 6:00 a.m. shall be paid additional compensation of $1.50 per hour for each hour that is worked between 6:00 p.m. and 6:00 a.m. This provision applies to regularly scheduled shifts only. This payment does not apply to flex hours, (i.e., if an employee is able to flex his/her hours to work between 6:00 p.m. and 6:00 a.m.) overtime, holiday pay, emergency call-outs or other non-scheduled work during these hours.

F. Compensation For employees Assigned To Care For Animals At Home

Employees who are assigned to care for animals in their home are entitled to compensation for the off-duty hours spent caring, grooming and feeding their animal.

The parties acknowledge that the Fair Labor Standards Act, which governs the entitlement to compensation for off duty caring, grooming and feeding of animals, entitles the parties to agree to a reasonable number of hours per week or per month for the performance of such duties. It is the intent of the parties through the provisions of this agreement to fully comply with the requirements of the Fair Labor Standards Act. In addition, both parties believe that this agreement does comply with the requirements of the Fair Labor Standards Act, including, but not limited to Department of Labor regulation 29 CFR section 785.23.

Employees assigned as animal caregivers at home shall be paid $7.25 per hour for such duties and are not permitted to work more than two (2) hours per week on such duties. The $7.25 is intended to comply with the federal minimum wage per the FLSA. If that wage increases, the compensation for such duties will increase to match the federal minimum wage. Since such hours are in addition to an employee's regular work hours, if such employees exceed the overtime threshold for the week by the performance of the off-duty animal caregiver duties, employees will be paid at 1.5 times the $7.25 per hour rate, i.e., $10.875 (up to a maximum of two hours per week) for such duties for a total weekly amount of $21.75.

1. Only Community Services employees who are regularly assigned to the Irvine Animal Care Center are eligible for this compensation;
2. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for this compensation, depending on the frequency and regularity of these duties.

Article 16 - Overtime and Work Schedule

A. Overtime Compensation

Hours worked or earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one and one-half (1 1/2) times the employee's hourly rate when such work is approved by the Department Director (or his/her designee). Unit members work a seven day FLSA workweek (168 recurring hours). Unit members shall be paid for all hours worked. Unit members shall record

hours worked in fifteen minute increments of time. When an employee works less than eight minutes into the next pay increment, the time should round down to zero. When an employee works more than eight minutes into the next payroll increment, the time rounds up to fifteen minutes. Overtime may be converted to compensatory time or paid for at the option of the employee.

As of the effective date of this Agreement, no hourly classifications qualify as exempt from the overtime provisions of the Fair Labor Standards Act.

B. Compensatory Time

Employees may accumulate a maximum of one hundred twenty (120) hours compensatory time in lieu of overtime compensation on the basis of one and one-half (1 1/2) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

C. Stand-by-Time

Regular full-time employees shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments, including standby for court. If a City holiday falls on a weekend, employees on standby will receive an additional two (2) hours standby pay for each of these holidays.

D. Work Schedules

Employees shall be scheduled to work regular work shifts. In the event overtime is required, compensation for said overtime shall take the form of one of the following, at

the employee's request, subject to the approval of the Department Director (or his/her designee):

1. Paid overtime at 1 1/2 times the employee's hourly rate;
2. Accrued compensatory time to a maximum of 120 hours;
3. An employee will be able to flex his/her time within the same workweek (i.e., take off an equivalent number of hours).

In the event the City institutes a City-wide policy to prohibit or restrict paid overtime, employees shall request, subject to the approval of the Department Director (or his/her designee), one of the following methods of compensation for overtime.

1. Flex time within the same workweek (i.e., take off an equivalent number of hours).
2. Accrued compensatory time to maximum of 120 hours.

An employee may be required to take flex time in lieu of paid overtime or accrued compensatory time off by his/her Department Director (or his/her designee) to attend meetings of City Council, City Commissions, or City committees, provided the employee is given written notification at least 14 calendar days in advance.

E. Distribution of Overtime

1. Every effort shall be made to equalize overtime opportunities for employees fully qualified to perform the work required.

2. If the responsible supervisor determines that overtime is necessary on work that started on an assigned shift, the assigned employee(s) may continue with that work as an extension of the assigned shift.

Article 17 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work

schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Directors to make an informed decision and a summary of how necessary coverage and current service levels will be improved or maintained. Approved alternate work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences that are in excess of one week.

In an emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require that the employee to work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a 14-calendar day notice. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered on a case-by-case basis.

Article 18 - Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, the total cost to the city for medical, dental, psychological, and vision insurance shall not exceed $694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XVIII, item A., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XVIII, item A., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential penalties or taxes under the Affordable Care Act. The City shall

make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and ICEA.

D. Employees not claiming any dependent on any health plan (medical, dental, psych) shall receive $150 per month. The stipend may be taken as taxable cash.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. Insurance Committee

The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with claims history and with proposed changes in rates or coverage.

F. Pension and Pension Administration

1. The provisions of this Section D.1 shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

    a. The City shall invest an amount equal to fifteen percent (15%) of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Effective August 11, 2011, the amount the City invests shall be reduced to 12.448%.

    b. Effective July 1, 2003, the City will deduct an amount equal to four percent (4%) of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all

employees who elected to remain in the City of Irvine DCPP. Effective August 11, 2011, the amount deducted from employee base salary shall be increased to 6.552%.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits past, present or future as provided under section D.2 of this article. Employees who elected to remain in the City of Irvine DCPP, shall continue participation until the employee terminates his/her employment from the City for any reason.

d. Employees shall become 50% vested upon completion of the probationary period, or if the probationary period is greater than six (6) months, employees shall become 55% vested in the retirement plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of five percent (5%) for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five years of service, he/she shall become 100% vested in the retirement plan.

e. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

2. The provisions of section D.2 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

a. The City's contract with CalPERS shall include the following options:
   - 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Section 21354.5)
   - One Year Final Compensation (Cal. Govt. Code Section 20042))
   - Military Service Credit as Public Service (Govt. Code Section 21024), in which the employees pays the entire cost.

- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427).
- 4th Level 1959 Survivor Benefits (Govt. Code Section 21574).
- Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938).

b. All employees hired on or after July 5, 2003, the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through an irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past or future, provided under the City of Irvine DCPP referenced in Article XVII, Section D.1.

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

f. Employer-Paid Member Contributions
   - The full eight percent (8%) cost of the CalPERS member contributions will be paid by the employee.

3. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees hired after implementation of the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

4. All “New Members” within the meaning of the California Public Employees’ Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City’s Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to three percent (3%) of each employee’s base salary in a Voluntary Employees’ Beneficiary Association (VEBA), which shall be established and administered by the Association.

2. Employees participating in the ICEA VEBA shall contribute an amount equal to one percent (1%) of base salary.

3. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City’s rates for the employee and the employee’s dependents at the cost to the former employee, now retiree.

4. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee’s death and provided that there has been no break in coverage since the employee’s retirement. This eligibility for continued coverage ceases if such spouse remarries.

5. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated on 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to Job-Share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129. The Association agrees the City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

Article 19 - Leaves

A. Vacation/Vacation Buyback

1. Employees shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	80 hours	160 hours
After 3 through 7	120 hours	200 hours
After 7 through 10	136 hours	216 hours
After 10 or more	160 hours	240 hours

When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The time during a calendar year at which an employee may take her/his vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if

The employee notifies his or her supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave,

whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave.

The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Wherever practicable, an employee may use compensatory time combined with vacation time when requesting specific vacation periods.

2. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

B. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify her/his immediate superior or the designated department contact prior to or within one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the director of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer or designee.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Worker's Compensation fund to the Finance Officer. An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

C. Personal Sick Leave Conversion

1. Regular employees shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, and October 1) to convert unused Personal Sick Leave in excess of 168 hours at a ratio of eight (8) hours day of vacation for every twenty-four (24) hours of Personal Sick Leave. Except that employees with at least ten years of full-time consecutive service shall be eligible to convert sick leave at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess Personal Sick Leave hours to vacation hours.

2. Regular full-time employees having less than ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of three (3) hours sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 120 hours of sick leave per employee per year. Regular full-time employees with at least ten (10) years of consecutive full-time service shall be eligible to convert unused personal sick leave in excess of 168 hours to cash at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate, subject to a maximum conversion of 80 hours of sick leave per employee per year. Conversion requests can be made only in whole hour increments that are evenly divisible by the conversion ratio. Conversion requests shall be submitted on appropriate forms as determined by the Personnel Officer. The annual election period and payment period shall be designated and announced by Administrative Services annually.

3. Upon separation from the City, a regular full-time employee having less than ten (10) consecutive full-time years of service who has a minimum of 168 hours of Personal Sick Leave may convert the excess Personal Sick Leave to vacation at the ratio of eight (8) hours of vacation for every twenty-four (24) hours of Personal Sick Leave. Employees who separate with at least ten (10) years, but not more than fifteen (15) years of consecutive full-time service, may convert unused sick leave over 168 hours at the rate of eight (8) hours of vacation for every sixteen (16) hours of personal sick leave**.** Employees who separate after fifteen (15) years of full-time, continuous service may convert any accrued and unused sick leave over 84 hours at the rate of eight (8) hours of pay at the normal base pay rate for every sixteen (16) hours of sick leave. Employees who separate with at least ten 10 years of consecutive full-time employment and have at least 200 hours of accrued sick leave at the time of separation, may convert all accrued personal sick leave hours at the ratios described in Section C.2 above. In this situation, the employee may exceed his/her vacation accrual limits. This paragraph shall not apply to employees who separate due to termination for cause or resignation or retirement in lieu of termination for cause.

D. Personal Leave

Effective the pay period which includes January 1st of each year, regular and probationary employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

E. Bereavement Leave

Upon request, employees shall receive necessary time off with pay, not to exceed forty (40) hours in any one (1) instance, to arrange for or attend a funeral or memorial service of a member of their immediate family. Bereavement leave will be granted in instances where the funeral or memorial service is taking place within 30 calendar days after the date of the immediate family member's death. The employee may determine the number of hours, up to 40, that are necessary for each instance of bereavement. For purposes of this Section, immediate family shall mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child**,** grandparent, grandparents in-law grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

F. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence to his/her Department Director of the birth or adoption of the employee's child. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

G. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with

the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

For employees working on shifts in the Police Department, time served on jury duty will be counted as work hours for that date up to the maximum number of hours normally worked by the employee on that date.

If a unit member is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

Employees who are scheduled for a swing or graveyard shift on a day they are called to jury service will be authorized to change their work hours in order to report to jury service.

Employees who are called to jury duty will not be subject to working their full graveyard or swing shift if there is not a minimum of 10 hours before or after assigned jury duty. If there is less than 10 hours between the end of a shift and the start of jury duty, employees will be permitted to leave their shift early to allow for a minimum break of 10 hours. In this situation, employees will be paid for the remainder of their shift. If

there is less than 10 hours between the end of jury duty and the start of their shift, employees will be able to delay their usual start time to ensure a 10 hour break in between. In this event, the employee's usual end time will remain the same. In this situation, employees will be paid from the start time of their shift until they report to work at the appropriate time to ensure a 10 hour break in between the end of jury duty and when they report to work. The 10 hour leave periods are provided by the City and employees are not required to use their accrued time.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

H. Military Leave

An employee shall be entitled to such benefits as are provided in the law An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director prior to the beginning of the leave.

I. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Worker's Compensation payments and his/her regular salary.
2. The employee's condition is not permanent and stationary as determined by the City's appointed doctor.

3. The employee shall accrue sick leave and vacation leave during the term of the Industrial Accident Salary Continuance.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine. Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

J. All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to 80 hours in a pay period.

Article 20 - Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for each of these holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay. If a holiday falls on an employee's regularly scheduled day off, the employee may take off another day within the workweek upon approval of his/her supervisor.

For employees not assigned to a 7-day work schedule holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. The classifications subject to a seven (7) day work schedule (i.e., the nature of their work requires coverage seven days per week:

1) Animal Services Officer;
2) Civilian Investigator I;
3) Civilian Investigator II;
4) Forensic Specialist I;
5) Forensic Specialist II;
6) Public Safety Assistant
7) Public Safety Dispatcher I;
8) Public Safety Dispatcher II;
9) Public Safety Lead Records Specialist;
10) Public Safety Records Specialist;
11) Senior Animal Services Officer;
12) Senior Public Safety Assistant; and
13) Supervising Public Safety Dispatcher

The Police Chief and/or the Human Resources Department have the ability to add or delete classifications from this list.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted compensatory time off, in lieu of pay.

Employees who are assigned to a 7-day work schedule (i.e., where their department is open seven days a week), as designated by their department shall observe holidays on the same days as employees who are not assigned to a 7-day work schedule with the following exceptions:

New Year's Day
Independence Day (4th of July)
Christmas Eve
Christmas Day

In this case, employees shall observe the holiday on the actual day of the holiday. If another City holiday falls on a Friday that City Hall is closed, as a result, the City observes the holiday on a different day, the holiday for employees assigned to a 7-day work schedule shall be observed on the Friday.

Notwithstanding the previous two paragraphs, for employees assigned to 7-day schedules, Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

The City will determine the total number of authorized holidays that would be observed by employees on a 9/80 work schedule for each holiday listed in this Article.
Employees assigned to a 7-day work schedule, as designated by their department, and are scheduled off their regularly scheduled shift of 10 hours or 12 hours, due to a holiday, shall receive holiday pay equivalent to their regularly scheduled shift.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:
Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:
Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave

Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

Article 21 - Educational Reimbursement/Professional Development

Employees covered by this Agreement shall be eligible for reimbursement for approved education or professional development expenses as set forth in City policy up to a maximum of $1,300 per calendar year. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination and/or longevity screenings, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

The City will provide ICEA an accounting of the allocated training funds on a quarterly basis, if requested. This accounting will show departmental funding levels and the use of funds by employee group/category, a list of vendors and amounts paid to those vendors.

Article 22 - Promotions

It shall be the City's policy to recruit the best-qualified persons available regardless of race, religion, color, creed, national origin, sexual preference, sex, or handicap unless sex or physical ability is a bonafide occupational qualification.

While recognizing the need for introduction of persons from outside City employment at all levels, the policy of the City is to promote employees already employed by the City when their personal qualifications, training, work performance, and work experience are determined to be comparable to applicants from other sources.

The Personnel Officer shall determine whether a recruitment shall be open or promotional, on the basis of assuring an adequate number of applicants with appropriate skills to constitute a competitive merit process.
An open selection process shall be held for all position vacancies in each class and class series. However, a promotional selection process may be utilized when the Personnel

Officer, after review with the Department Director, determines such a process is in the best interest of the City. Any unit employee who elects to participate in the recruitment and meets the minimum requirements for the position will be eligible to compete in the examination process. If the examination process includes a written test or graded test the employee will automatically receive an additional five (5) points to their score. Does not apply to practical tests or safety related tests.

When appropriate, vacancies within the unit may be filled by promotion or transfer of probationary or regular employees or other employees at the discretion of the appointing authority. Such promotion transfer shall be based on competitive examination and may include one (1) or more of the selection techniques set forth in the Personnel Rules and Procedures and measure of qualifications as may be determined by the Personnel Officer.

As set forth in the Personnel Rules and Regulations (Article 6, Section 5), an employee rejected during the probationary period from a position to which he/she was promoted shall be reinstated to the position and salary held prior to promotion if a vacancy exists, unless he/she is discharged for a reason which would have been sufficient to cause his/her discharge from his/her former position. If no vacancy exists, the employee shall be placed on a re-employment list for the classification from which he/she was promoted. Employees are not entitled to notice or a hearing if rejected during probation.

Article 23 - Layoff and Recall

Whenever in the judgment of the City Council, it becomes necessary for lack of work or lack of funds, or because the necessity for a position no longer exists, the City Council may abolish any position or employment in this bargaining unit. The employee holding such position may be laid off without the right of appeal. ICEA will be notified in writing of proposed layoffs of ICEA positions. Prior to the abolishment of any ICEA position in the competitive service due to lack of funds or a severe economic downturn, City Management will meet with ICEA representatives to discuss the following issues:

1. Reasons for proposed layoffs.

2. Possible alternatives to layoffs.
3. Alternative solutions to mitigate any effects of potential layoffs.

Although the City will consult with ICEA prior to implementing any layoffs in its bargaining unit, the final determination on the decision to implement any layoffs will be made by the City Council.

When a position within a department or division is abolished as is provided in Section II. G-110 of the City Code, the following general procedure shall be observed:

A. The order of layoff shall be established by the Personnel Officer or his/her designee. He/she shall list all employees in the affected classification(s) using the employees' performance reviews and seniority ratings.

B. An employee's seniority will be modified in the following manner, using the two most recent annual performance evaluation ratings for seniority demerits and the one most recent annual performance evaluation ratings for seniority merits:

Number of Ratings	Level of Rating	Modification to Seniority
1	Unsatisfactory or Needs Development	Subtract 1 year
2	Unsatisfactory or Needs Development	Subtract 3 years
1	Excellent	Add 1 year

The employee's seniority will be modified in the following manner:

Number of Ratings	Level of Rating	Modification to Seniority
1	Does not receive a minimum of Accomplished Standards rating	Subtract 1 year

2	Does not receive a minimum of Accomplished Standards rating	Subtract 3 years
1	Outstanding	Add 1 year

C. The order of layoff will begin with the employee(s) with the least modified total seniority. When the modified total seniority ranking is the same, the Appointing Authority shall take past performance evaluations and the needs of the City into consideration.

D. Prior to the establishment of the order of layoff, the Personnel Officer or his/her designee shall furnish all employees proposed to be included on the layoff list with a copy of the "Proposed Order of Layoff" and a copy of any materials not otherwise available to the employee which were relied upon by the Personnel Officer or his/her designee in establishing the employee's position thereon. If the employee wishes to contest the application of the criteria set forth in this policy to his/her position on the list, the employee may request an opportunity to present his/her case to the Personnel Officer or his/her designee within seven (7) calendar days following the establishment and distribution of the "Proposed Order of Layoff" list and supporting materials. After meeting with all employees wishing to be heard with respect to their position on the layoff list, the Personnel Officer or his/her designee shall establish the "Final Order of Layoff." The decision of the Personnel Officer or his/her designee shall be final and not subject to the grievance process.

E. No employee shall be laid off from his/her position in any department while an emergency, temporary, provisional, regular part-time and part-time, or contract employee is serving in the same classification in the same department. No regular employee shall be laid off in any department while a probationary employee is serving in the same classification in the same department. Employees to be laid off shall be given at least fourteen (14)-calendar days prior notice.

F. An employee who receives a final layoff notice under the provisions of this policy who holds regular full-time status may within seven (7) calendar days of receipt of the layoff notice request demotion to a position within the employee's classification series for which the employee possesses the minimum qualifications and the position remains a budgeted position. In that event, the employee's position on the layoff list shall be reevaluated as though the employee is in the new classification utilizing the same criteria established for the original list.

G. After the bumping process has occurred and if no budgeted position is available within the classification series, the employee may request a transfer or demotion to a position in a similar classification series for which the employee possesses the minimum qualifications and the position remains a vacant budgeted position. For the purposes of this section, a similar classification will mean an ICEA-represented position that is in the same or lower pay grade and requires similar education, skills and/or experience as the position which the employee currently holds, as determined by the Personnel Officer. The employee's request will be considered by the Personnel Officer, who will make every effort to provide for reasonable education and experience equivalencies in determining an employee's minimum qualifications for the available position.

If there is more than one affected employee who is requesting a transfer or demotion into an available position, the City will determine the order of bumping by using the same methodology as described in sections A, B and C of this Article.

H. The names of employees laid off or demoted in lieu of layoff shall be placed upon reemployment lists for one year for those job classes requiring basically the same qualifications, duties, and responsibilities of the class from which layoff or demotion in lieu of layoff was made.

I. Persons whose names are placed on reemployment lists, and who are re-employed within the prescribed period, shall be regarded as having been on "unpaid" leave of absence during this period and will resume accruals of vacation, sick, and other leaves per this Agreement.

Article 24 – Seniority

Seniority shall be defined as the total amount of actual continuous service as a full-time employee, excluding approved leaves of absence without pay in excess of thirty (30) calendar days, including leave of absence for service in the Armed Forces of the United States. Seniority will be a factor when considering promotions and transfers and layoffs. Upon written request the ICEA shall receive whatever written seniority list is available at the time of the request.

An employee who is not a full-time employee shall not lose any previously accrued seniority by virtue of the employee having a status other than that of a full-time employee; however, no seniority shall accrue during any period of time in which an employee is on an approved leave without pay in excess of thirty (30) calendar days, or during any period of time in which an employee has a City employment status other than that of a full-time employee or a job-sharing employee. An employee shall only be entitled to a fifty percent (50%) seniority accrual (i.e., seniority shall be accrued at the rate of one day of seniority for each two days of service) during any period of time in which an employee is classified as a job-sharing employee.

Article 25 - Safety

The City shall provide and maintain a healthy and safe place of employment. No employee shall be required to work under conditions dangerous to the employee's health or safety. The City shall provide and maintain all safety equipment and comply with all health and safety laws and regulations necessary for employees to perform their jobs in a safe manner. Employees shall report unsafe practices, equipment or conditions to their supervisors.

ICEA shall have the right to appoint a voting member to the City Safety Committee. The Committee will develop appropriate rules and regulations to strengthen safety in the workplace.

Any employee has the right to request a Safety Committee review of workplace conditions in written form. The Safety Committee will investigate employee requests for review of worksite

conditions and make recommendations to reduce or eliminate the concern. A report of findings shall be provided to the employee within sixty (60) calendar days from receipt of written concern. The secretary of the Safety Committee shall forward a copy of all regular meetings minutes to the Secretary of ICEA on a regular basis. The Safety Committee shall meet on a monthly basis unless the Committee deems otherwise.

Article 26 - Uniforms, Safety Gear and Inclement Weather Gear

Employees in designated classes shall be provided and required to wear City uniforms. Steel-toed shoes and safety glasses will be provided to employees whose regular duties require their usage. Rain gear will be provided to employees whose regular full-time duties require them to work outside on a continuous basis in adverse elements.

The City will provide an orange, reflective jacket to each full-time employee who regularly works in the public street section and traffic signal repair section. Each employee will be responsible for the reasonable care and cleaning of his or her jacket. Jackets shall be used for official City business only, and shall have the City logo or identification prominently displayed.

Article 27 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least 24 hours in advance, with Human Resources staff.

A copy of any commendations, written warnings or reprimands, disciplinary actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee.

Written reprimands shall be retained at least one year. If after one year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand

be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 28 - Child Care

It is understood that twenty percent (20%) of the enrollment of the Irvine Child Care Center will be made available to children of City of Irvine employees subject to availability of openings within the facility at the cost of the employee.

Article 29 - Probationary Period/Provisional Appointment/Job Sharing

The probationary period shall be six (6) months of actual and continuous service unless otherwise extended for up to 6 months under the Personnel Rules and Procedures, with the exception of the following classifications for which the probationary period shall be one (1) year of actual and continuous service; Public Safety Dispatcher, Public Safety Assistant, Senior Public Safety Assistant, Forensic Specialist I/II, Civilian Investigator I/II, Police Recruit and Supervising Public Safety Dispatcher, shall have a probationary period of one (1) year of actual and continuous service.

In the case of a current full-time employee in an ICEA represented class receiving a provisional appointment (i.e., moving to a position where there is a vacancy – Acting for current employees and Interim for employees hired from outside the City) such provisional appointment shall not be made for a period of less than twenty-eight (28) calendar days. If the position is in another bargaining unit, the employee shall not be entitled to the following changes in compensation and benefits: Annual Physical Examination reimbursement, Retiree Health Voluntary Employees' Beneficiary Association (VEBA) plan, and health plans.

Interested employees in ICEA-represented classes may be considered for job sharing.

Article 30 - Non-Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under the law. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and right to join the ICEA.

Article 31 - Contracting Out

The City will notify ICEA in writing at least fourteen (14) calendar days in advance of entering into any contract which will result in a reduction in regular hours of existing employees in classifications set forth in Attachment I; provided, however, nothing herein shall limit the City's right to contract out beyond that notice. If ICEA feels that an impropriety has occurred regarding contracting out, ICEA may contact Human Resources in writing and the situation will be investigated.

In the event a member of the ICEA bargaining unit is laid-off from his/her employment with the City, without opportunity to voluntarily demote into a lower position or transfer into a comparable position in the City, due to privatization or contracting-out of a city service, the City will provide a severance. The severance shall be equivalent to forty (40) hours of pay, at the current base hourly rate of pay, for every year of full-time City service rounded to the closest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual’s current elected coverage levels and insurance providers, payable through the end of the month in which the severance expires.

A. For example, an individual with seven (7) years and seven (7) months of City service would receive eight (8) weeks, or 320 hours, of pay and three (3) months cash equivalent of health insurance premiums.

Article 32 - Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and effect. Should any change be made in any State or Federal law, or in any rules and regulations implementing such legislation, or in any City Charter provision, which would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The Parties hereto shall meet-and-confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 33 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppage, the ICEA hereby agrees that during the term of this Agreement, neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature against the City whatsoever, or wheresoever located, including but not limited to disputes which are related to the subject matter contained in this Agreement; disputes which are specifically not subjects of this Agreement; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, ICEA and its officers will take steps reasonably within their control to end or avert the same.

Those represented by the ICEA will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of

this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by ICEA found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to Personnel Rules and Regulations.

Article 34 - Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the 11th day of August 2017.

CITY OF IRVINE

By _____

By _____

By _____

By _____

By _____

By _____

IRVINE CITY EMPLOYEES ASSOCIATION

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

By _____

ATTACHMENT I
HOURLY CLASSIFICATIONS REPRESENTED BY
I C E A

POSITION TITLE	PAY GRADE
Accounting Technician	6
Administrative Aide	8
Administrative Secretary	7
Animal Care Center Coordinator	10
Animal Services Officer	7
Aquatics Coordinator	10
Armorer	10
Building Inspector	10
Civilian Investigator I	8
Civilian Investigator II	9
Code Enforcement Technician	6
Community Services Program Coordinator	10
Community Services Specialist	6
Computer Technician	8
Construction Inspector	10
Deputy City Clerk I	7
Deputy City Clerk II	9
Disability Services Coordinator	10
Duplicating Technician	6
Engineering Aide	6
Engineering Technician	8
Equipment Mechanic	7
Equipment Operator I	7
Equipment Operator II	8
Exhibition Coordinator	10
Facilities Maintenance Specialist	8
Facilities Maintenance Technician	6
Facilities Reservations Coordinator	10
Food Services Specialist	9
Forensic Specialist I	8

Forensic Specialist II	10
GIS Application Specialist	8
Human Resources Specialist	9
Information Specialist	6
Inspector Trainee	8
Landscape Contract Specialist	8
Landscape Maintenance Specialist	8
Landscape Maintenance Technician	6
Lead Accounting Technician	8
Lead Equipment Mechanic	9
Lead Information Specialist	8
Lead Facilities Maintenance Technician	9
Lead Landscape Maintenance Technician	9
Lead Mail Coordinator	7
Lead Permit Specialist	9
Lead Street Maintenance Technician	9
License Specialist	6
Mail Coordinator	6
Master Facilities Maintenance Specialist	10
Master Landscape Maintenance Specialist	10
Media Services Specialist	7
Multimedia Specialist, IPD	10
Office Specialist	4
Paratransit Driver	4
Permit Specialist I	6
Permit Specialist II	7
Plans Examiner	10
Police Recruit	7
Principal Code Enforcement Inspector	12
Program Assistant	7
Program Specialist	9
Property & Evidence Specialist I	7
Property & Evidence Specialist II	8
Public Information Specialist	6
Public Safety Assistant	6

Public Safety Dispatcher I	7
Public Safety Dispatcher II	8
Public Safety Lead Records Specialist	8
Public Safety Records Specialist	6
Senior Accounting Technician	7
Senior Animal Care Specialist	6
Senior Animal Services Officer	9
Senior Building Inspector	12
Senior Code Enforcement Inspector	10
Senior Construction Inspector	12
Senior Equipment Mechanic	8
Senior Office Specialist	6
Senior Permit Specialist	8
Senior Public Safety Assistant	8
Senior Registered Veterinary Technician	10
Senior Vehicle Installation Technician	10
Street Maintenance Specialist	8
Street Maintenance Technician	6
Supervising Public Safety Dispatcher	10
Traffic Systems Analyst	11
Traffic Systems Specialist	10
Traffic Systems Technician	8
Transit Program Dispatcher	8
Vehicle Installation Technician	6
Video Production Specialist	8

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION (IPEA), AND SUPERSEDING ALL PREVIOUS IPEA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine Professional Employees Association (IPEA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and IPEA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017 through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the IPEA was adopted by the City Council pursuant to Resolution No. 15-77.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and IPEA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 3

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

EXHIBIT A

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MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE 30, 2019

Article 1 – Preamble

This Agreement is entered into pursuant to the Meyers-Milias-Brown Act (Government Code Sections 3500 et seq.) and City Resolution No. 341, for the purpose of memorializing the Agreement reached between the City and Irvine Professional Employees Association (IPEA) as part of the meet-and-confer process, in order to provide harmonious relations, cooperation, and understanding between the City and its employees.

Article 2 – Recognition

IPEA is hereby acknowledged as the exclusive Recognized Employee Organization representing the employees in the classifications listed in Attachment I (Full-time hourly and exempt non-sworn, non-confidential employees).

Article 3 – Purpose

The parties agree that the purpose of this Agreement is: to promote and provide harmonious relations, cooperation, and understanding between the City and the employees covered herein; to provide an orderly and equitable means of resolving differences which may arise under this Agreement, and to set forth the full agreements of the parties reached as a result of meeting and conferring in good faith regarding matters within the scope of representation for employees represented by the IPEA.

Article 4 – Scope

The scope of representation shall include all matters relating to employment conditions and employer-employee relations, including, but not limited to, wages, hours, and other terms and conditions of employment, except, however, that the scope of representation shall not include consideration of the merits, necessity, or organization of any service or activity provided by law or executive order.

Article 5 - City Rights

The City retains all rights it had prior to this Agreement except those rights specifically delegated by this Agreement, provided the City shall exercise those rights in compliance with applicable state law, the City Charter, and the provisions of this Agreement.

Except as expressly limited by this Agreement, the City retains the exclusive right (a) to direct employees of the City; (b) to hire, promote, transfer, and assign employees to positions within the City; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend, or discharge employees for proper cause as provided by City Ordinance; (e) to determine the mission of the City and its various departments, its budget, its organization, the number of employees, and the methods and technology for performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all rights not clearly and expressly limited by this Agreement are specifically reserved to the City, even though not enumerated.

Article 6 - Employee Rights

Employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3502. Neither the City nor IPEA shall interfere with, intimidate, restrain, coerce, or discriminate against employees who exercise their rights under this Agreement or the law.

Article 7 - Association Rights

IPEA shall notify the City in writing of the names of its representatives as follows: Consultant, Officers, Bargaining Committee Members, and Departmental Representatives. The City shall provide IPEA on a monthly basis, if changes occur, with the following: A list of employees in the classifications set forth in Attachment I; the names of new hires, promotions, and terminations in the classifications set forth in Attachment I; City of Irvine job postings; and copies of current salary schedules. On a quarterly basis, the City will provide IPEA with names and home addresses of all IPEA-represented employees. This information is for the confidential use of IPEA and the City shall not be responsible and will be held harmless by IPEA for inappropriate release of this information by IPEA. Upon written request, the IPEA shall receive available information relating to contract administration and fringe benefits including pension and insurance plans.

The City shall make available reasonable bulletin board space in designated employee areas for the use of IPEA to post notices relating to matters of interest to IPEA and to the employees.

A reasonable number of employees shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor, for purposes of participation in the meet-and-confer process.

Designated IPEA representatives shall be entitled to leave their work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of attending meetings called by Management or to participate in established City committees, such as but not limited to, Citywide Insurance Committee, Defined Contribution Pension Plan Committee and Safety Committee.

A designated IPEA representative shall be entitled to leave his/her work during working hours without loss of pay for reasonable periods of time, with prior approval of their supervisor for purposes of reviewing and processing grievances. IPEA representatives may have access to IPEA members providing that supervisors are notified prior to a meeting being scheduled and that meetings held will not interfere with work.

In order to allow IPEA an opportunity to handle the business affairs of its members, the City shall, at the beginning of the calendar year, establish a time bank of one-hundred and eighty (180) hours to be used by board members as authorized by the IPEA Board for training, grievances, board meetings, etc. IPEA agrees the effective operation of the City departments is not to be adversely affected by the use of the time bank by IPEA members. No overtime will be paid for an employee to fill in for another using the time bank. Hours from the time bank will not be cumulative from year to year. Time for meet-and-confer preparation and meetings, and/or attendance at special meetings called by the City shall not be charged against the time bank.

The City shall allocate reasonable office space to IPEA in the Civic Center at no cost to IPEA.

At the orientation of new employees, a City-approved IPEA informational packet will be provided to those who would be eligible to join IPEA. In addition, IPEA and/or its representative will be provided with the opportunity to have 10-minute access to employees in IPEA-represented positions during new employee orientation.

Article 8 - Payroll Deductions

The City will, during the term of this Agreement, deduct bi-weekly dues and other fees as specified by IPEA under the authority of a membership application signed by each participating employee, which shall be approved by IPEA and remitted promptly to the Payroll Office.

Article 9 - Quarterly City-IPEA Meetings

The City's designated management staff shall meet with the IPEA President, representative and IPEA board members, on a quarterly basis. The purpose of these meetings is to discuss issues of common interest and to resolve mutual problems in a constructive fashion. The parties shall exchange suggested agenda topics one week before the meeting date. Grievances or disciplinary action in progress may be discussed at these meetings only by mutual consent, and discussion of such topics does not preclude subsequent resolution via the grievance or disciplinary procedure. Meet-and-confer subjects may be discussed by mutual consent, but this does not preclude exercise of further meet-and-confer options by either party. Persons other than those described above may attend these meetings only by prior mutual consent.

Article 10 - Grievance Procedure

A. Purpose

The purpose of the grievance procedure is to enhance communications between employees and employer by providing a fair and impartial review and consideration of grievances within a reasonable time period without jeopardizing employees' positions or employment.

B. Matters Subject to the Grievance Procedure

A grievance may be filed for alleged violation of any personnel rule or regulation; for the alleged violation of a section of this agreement; or an alleged unfair treatment of an employee; or alleged violation of commonly accepted safety practices or procedures. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations. It shall not be used in matters resulting from disciplinary action or other appeal procedures that exist in accordance with the Personnel Ordinance and Resolution.

Any matter being grieved by an employee will be kept confidential by immediate supervisors and higher-level authorities except in conjunction with the investigation of the grievance.

C. Informal Grievance Adjustment

An employee who believes an alleged violation of matters subject to the grievance process has occurred shall first be required to exhaust the informal grievance level prior to filing a formal grievance. The employee shall have fourteen (14) calendar days from the date the employee had notice of the alleged violation, which he/she believes constitutes a grievance.

The informal grievance level shall consist of the employee verbally informing his/her immediate supervisor of the alleged violation. The immediate supervisor shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days. Any matters, for which he/she does not have authority to make a decision, should be brought to the attention of a higher-level supervisor who does have the proper authority. If the employee is not satisfied with the decision reached through the informal

discussion, he/she may bring the matter to the attention of the next level of authority (i.e., the immediate supervisor's direct supervisor) within fourteen (14) calendar days of the immediate supervisor's response. The next level of authority shall have fourteen (14) calendar days to reply. If the employee is still not satisfied with the decision, within fourteen (14) calendar days after the decision, he/she may bring the matter to the attention of the next level of authority (if more levels below Department Director exist). If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply.

In incidents involving disputes of an agreement with an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal.

D. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing (Form No. 20-33) to their Department Director, with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee). The Department Director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievant is not satisfied with the decision at the Department Director level, the grievant may appeal the decision to the Assistant City Manager or his/her designee, within fourteen (14) calendar days of receipt of the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at a previous level, and a clear, concise

statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the Department Director.

The Assistant City Manager or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Assistant City Manager may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Assistant City Manager, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Assistant City Manager's decision submit a request in writing to the Assistant City Manager for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitration which shall be provided for hereinafter. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service (SMCS) to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The party who strikes first shall be determined by mutual agreement or flipping a coin.

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees for witnesses and conferees, or the costs for witnesses and conferees, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issue and the arbitrator's decision on arbitrability cannot be challenged by the City or overturned.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City Policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days to all parties the written findings and advisory recommendations that he/she has prepared.

The City Manager shall have the authority to accept the recommendation of the advisory arbitrator in whole, or in part, or reject the recommendation entirely and formulate his/her own decision on the grievance. The decision of the City Manager shall be provided to all parties within thirty (30) calendar days.

The City Manager reserves the right to modify any recommendation of a Hearing Officer. The City will bear the entire costs of the Hearing Officer.

The City Manager has the power to render a final decision of a grievance, which shall be binding on all parties. If, upon review, the City Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision.

If the advisory recommendation is acceptable to the City, the City Manager shall take appropriate action to implement the recommendation. If no action is taken by the City, or the grievant does not concur with the Advisory Arbitrator's recommendation, the grievant may appeal, in writing, to the City Manager within fourteen (14) calendar days of the receipt of the Advisory Arbitrator's recommendation.

b. City Manager Review

The Association shall be permitted to concur in a grievant's request to have a hearing before the City Manager to resolve his or her grievance. If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Assistant City Manager's decision, may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

The City Manager shall render a final and binding decision within thirty (30) calendar days following the conclusion of the hearing.

E. General Conditions

1. A formal grievance on interpretations/actions of an agreement, not involving a specific supervisor or Department Director, may be submitted directly to the Personnel Officer or his/her designee. The decision of the City Manager on agreement disputes shall not restrict an employee from other avenues of appeal available under law.

2. The Personnel Officer shall receive and retain copies of all written materials pertaining to the grievance.

3. At any step of the informal grievance adjustment or formal grievance procedure, a Department Director, supervisor, or employee may request a representative of the Personnel Office to participate in any discussion which may take place. Grievances may be initiated by the concerned employee or the Association.

4. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

5. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, it shall be assumed that the grievance has been settled on the basis of the last decision reached.

6. If management fails to respond within any of the time limits specified in the policy, the employee may proceed to the next level as if management responded on the last day possible.

7. Any extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 11 - Disciplinary Action

A. Disciplinary Authority

The Department Director, after consultation with the Personnel Officer shall have the right, for reasonable cause, to demote, dismiss, reduce in pay or suspend without pay for up to thirty (30) calendar days any regular (i.e., passed probation) member of the unit.

B. Disciplinary Procedure

Upon determination that some form of discipline should be imposed upon an employee, the Department Director or his/her designee shall provide the employee with written notice, which includes the components listed below.

1. The proposed action to be taken.

2. The charges on which the proposed action is based, including all relevant written materials, written reports and documents, which support these charges.

3. The proposed date on which the disciplinary action will take place.

4. The fact that the employee is entitled to respond to the charges either orally or in writing to the Department Director at least seven (7) calendar days after receipt of notification. If the written notice has been issued by the Department Director, the employee may direct his/her response to the Personnel Officer**.** Failure of the employee to make a written or oral response of request will constitute waiver of the right to respond.

5. If the employee elects to respond in person, a meeting shall be conducted at which the employee shall be given the opportunity to respond to the charges. The meeting shall be held by the Department Director or the Personnel Officer in those instances where the written notice has been issued by the Department Director. The employee shall be entitled to be represented by counsel or other person of his/her choosing during the course of the above proceeding.

6. After following the above procedure, the Department Director or the Personnel Officer shall prepare the written notice of decision to be served personally upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The City shall have the right to place any employee on paid administrative leave pending investigation and processing of any potential disciplinary action. The provisions of this Article shall not apply to reductions in pay, which are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal

When formal disciplinary action of dismissal, demotion**,** reduction in pay, reduction of accrued leaves equivalent to 3 or more days or suspension without pay for three (3) or more days has been taken pursuant to this Article, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or accrued leaves or suspended without pay for three (3) or more days, may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

3. Hearing Procedure

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary actions imposed pursuant to this Article. In case of termination, however, the Association may request a Hearing Officer be selected from a list provided by the State Mediation and Conciliation Service (SMCS). The parties shall request the SMCS to supply a panel of seven (7) names of persons experienced in hearing disciplinary cases for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Hearing Officer. The order of striking shall be determined by mutual agreement or flipping a coin. The Hearing Officer will not be an employee of the City of Irvine. If the Association requests a Hearing Officer from the SMCS, the costs of the Hearing Officer's services shall be equally divided by the Association and the City.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight, and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The City shall first present its witnesses and evidence to sustain the

charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the City and the employee or their respective designees may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager no later than thirty (30) calendar days after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charges, if any, the Hearing Officer finds are sustained or not sustained and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

4. <u>Appeal Procedure for Suspensions of Less Than Three (3) Days and Reductions of Accrued Leaves Equivalent to less than (3) Days</u>

a. A member of the unit who has been suspended without pay, for less than three (3) days, may appeal to the Department Director, or in the

event the discipline has been issued by the Department Director, the Personnel Officer, within seven (7) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing.

b. Hearing Procedure:

- At least seven (7) calendar days prior to the hearing, both parties shall provide a list of witnesses and or exhibits to the Department Director or Personnel Officer.

- During the hearing, the Department Director or Personnel Officer shall hear and consider the evidence, witnesses, and/or exhibits from both parties.

- The Department Director or Personnel Officer may grant a continuance for any reason he/she believes to be important to reaching a fair decision.

- The Department Director or Personnel Officer shall consider all evidence and shall base his/her findings on the preponderance of evidence. He/she shall render his/her decision as soon as possible after the conclusion of the hearing, but in no event later than fourteen (14) calendar days after conducting the hearing, unless agreed to by the parties.

- The Director or Personnel Officer's decision shall be final and binding.

5. Mediation Procedure

In cases of dismissal, after the parties have selected a Hearing Officer and a hearing date as provided above, the parties may, by mutual agreement, request non-binding mediation to resolve the dispute prior to arbitration. The selection of the mediator shall be made by mutual agreement. The costs of the mediator services shall be equally divided by the Association and the City.

D. Dismissal

Dismissal of any employee shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions, which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline, except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

E. Polygraph Examination

In reference to this provision, no disciplinary action shall be taken against an employee refusing to submit to a polygraph examination; nor shall any comment be anywhere recorded indicating that an employee offered to take, took or refused to take polygraph examination unless otherwise agreed to in writing by the parties; nor shall any testimony or evidence of any kind regarding an employee's offer to take or refusal to take, or the results of a polygraph examination, be admissible in any proceeding pursuant to this Agreement, unless otherwise agreed to in writing by the parties.

Article 12 - Maintenance of Benefits

It is the understanding of the parties that the wages, hours, and other terms and conditions of employment contained in this Agreement will not be reduced and shall remain in full force and effect during the entire term of this Agreement; except as expressly provided herein or except by mutual agreement.

Article 13 – Salary

A. Salary Grade Structure: The City of Irvine's Salary Grade Structure, which includes the classifications represented by the Association in this unit, is included as Attachment I.

B. Position Classification to Salary Grades: The classification of individual positions to pay grades is the City's sole responsibility and will be based upon Human Resources' evaluation of the classification.

C. Classification Requests: During the period designated by Human Resources each year, an employee may request a re-evaluation of the position's responsibilities by submitting a new Comprehensive Position Questionnaire (CPQ) with a cover memorandum explaining the changes in duties since completion of the most recent existing CPQ. The employee's department director, manager (if applicable), and supervisor will review the request and make a recommendation which will include an explanation of why the duties have changed and an assessment of the stability of the changes. Any change in classification will take effect the pay period that includes July 1 of the following fiscal year.

D. Pay Progression in a Salary Grade

Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay progression will be provided according to the following schedule:

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Unsatisfactory or Needs Development	0%
Less than Maximum	Accomplished Standards, Excellent or Outstanding	5% base adjustment, limited to maximum of pay grade
Greater than or equal to Maximum		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

E. Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Agreement shall be increased by two percent (2.0%).

F. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary merit review. All subsequent performance reviews will be conducted according to the Annual Performance Appraisal schedule. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

Article 14 -Bilingual Pay

Department Directors shall annually designate which positions should be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period which he/she is not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

Article 15 - Overtime and Work Schedules

A. Overtime Compensation for Employees on Schedule A:

Hours earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one- and one-half (1 1/2) times the employee's hourly rate when such work is approved by the Department Director (or his/her designee). Unit members work a seven day FLSA work week (168 recurring hours). As of the effective date of this Agreement, no classifications on Schedule A qualify as exempt from the overtime provisions of the Fair Labor Standards Act. Unit members shall be paid for all hours worked. Unit members shall record hours worked in fifteen minute increments of time. When an employee works less than eight minutes into the next pay increment,

the time should round down to zero. When an employee works more than eight minutes into the next payroll increment, the time rounds up to fifteen minutes.

Overtime may be converted to compensatory time or paid for at the option of the employee.

B. Compensatory Time for Employees on Schedule A:

Employees may accumulate a maximum of eighty (80) hours compensatory time in lieu of overtime compensation on the basis of one- and one-half (1 1/2) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

C. Stand-by Time for Employees on Schedule A:

Regular full-time employees shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments.

D. Work Schedules:

Unit members work a seven day FLSA work week (168 recurring hours).

Work schedule is defined as an employee's regularly assigned hours of the day and days per week and may include:

1. The 9/80 schedule (four nine hour days per work week and one alternating eight hour day/regular day off). Employees working the 9/80 have an FLSA work week designated as beginning four hours into their alternating regular day off (eight hour day).

2. The 5/40 schedule (five eight hour days per work week). Employees working the 5/40 have a FLSA work week designated as beginning at 12:00 a.m. on Saturday through 11:59 p.m. Friday.

3. The 4/10 schedule (four ten hour days per work week). Employees working the 4/10 have a FLSA work week designated as beginning at 12:00 a.m. on Saturday through 11:59 p.m. Friday.

Employees in classifications listed on Schedule A shall be scheduled to work regular work shifts. In the event overtime is required, compensation for said overtime shall take the form of one of the following, at the employee's request, subject to the approval of the Department Director (or his/her designee).

1. Paid overtime at one- and one-half (1 1/2) times the employee's hourly base rate;
2. Accrued compensatory time to a maximum of eighty (80) hours;
3. An employee will be able to flex his/her time within the same workweek (i.e., take off an equivalent number of hours).

In the event the City institutes a citywide policy to prohibit or restrict paid overtime, employees in classifications listed on Schedule A shall request, subject to the approval of the Department Director (or his/her designee), one of the following methods of compensation for overtime.

1. Flex time within the same workweek (i.e., take off an equivalent number of hours);
2. Accrued compensatory time to a maximum of one hundred and twenty (120) hours.

An employee in a classification listed on Schedule A may be required to take flex time in lieu of paid overtime or accrued compensatory time off by his/her Department Director (or his/her designee) to attend meetings of City Council, City Commissions, or City committees, provided that the employee is given written notification at least fourteen (14) calendar days in advance.

Article 16 - Alternate Work Schedules

Unit members may request from their Department Directors to work a 9/80 or a 4/10 alternative workweek schedule. Department Directors will review requests for alternate work schedules, on a case-by-case basis, based on the following criteria: 1) productivity and service to the public will not be decreased, 2) that there will be no adverse effects on the operation of any City department or work unit, and 3) with due regard to the wishes of the employee.

Requests for an alternate work schedule will include the information required by the Department Director to make an informed decision and a summary of how necessary coverage and current service levels will, at a minimum, be maintained. Approved alternate work schedules may be temporarily modified by a Department Director in the case of vacations, vacancies or other absences which are in excess of one (1) week.

In an unforeseen emergency, the Department Director may direct the employee to work a different schedule on a 24-hour notice. If the alternate work schedule is not effective, the Department Director will require the employee to work a different alternative workweek or return to a more standard workweek (i.e., a 5/40) with a fourteen (14) calendar day notice. When a Department Director perceives a problem exists because of the alternate work schedule, he/she will notify the involved employee(s) and give them seven (7) calendar days to respond to the issue prior to instituting a new schedule. If an employee finds it necessary, he/she may make a request to return to a more standard workweek, which will be considered, on a case-by-case basis.

Article 17 – Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage, with noted exceptions:

Indemnity Medical Insurance

The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

Indemnity Dental Insurance

The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

Health and Dental Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

Vision

One (1) vision care plan.

For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological, and vision insurance shall not exceed $ 694.04 per employee; $754.04 per employee plus one; and $1064.31 per employee plus family per month. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article 17, item A., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article 17, item A., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential penalties or taxes under the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions towards health insurance benefits under this reopener, absent mutual agreement between the City and IPEA.

D. Employees not claiming any dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be used for deferred compensation, taxable cash, or to purchase voluntary additional life insurance, or enhanced dental plans.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. The Insurance Committee and representatives from management will meet each Fall to review coverage, cost containment methods, claims processing service, claims experience and to recommend plan and design changes to the employees. The group will be made up of no more than two (2) representatives from each bargaining group and the president or a designated representative for the bargaining group. The group will be provided with such information as claims history, and with proposed changes in rates or coverage.

F. Pension and Pension Administration

1. The provisions of this Section D.1 shall apply to employees as of June 30, 2003, who elected to decline the CalPERS benefits.

    a. The City shall invest an amount equal to fifteen percent (15%) of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Effective August 11, 2011, the amount the City invests shall be reduced to 12.448%.

b. Effective July 1, 2003, the City will deduct an amount equal to four percent (4%) of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elected to remain in the City of Irvine DCPP. Effective August 11, 2011, the amount deducted from employee base salary shall be increased to 6.552%.

c. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits past, present or future, as provided under section D.2 of this article. Employees who elected to remain in the City of Irvine DCPP shall continue participation until the employee terminates his/her employment from the City for any reason.

d. Employees shall become 50% vested upon completion of the probationary period, or if the probationary period is greater than 6 months, employees shall become 55% vested in the retirement plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five years of service, he/she shall become 100% vested in the retirement plan.

e. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

2. The provisions of this section D.2 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

a. The City's contract with CalPERS shall include the following options:
   - 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   - One Year Final Compensation (Cal. Govt. Code Section 20042)
   - Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
- 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
- Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

b. All employees hired on or after the effective date of the CalPERS contract shall become members of the CalPERS Retirement Program.

c. All active employees of the Association shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All Association members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Article 17, Section D.1.

d. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

e. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

f. The full percent (8%) cost of the CalPERS member contributions will be paid by the employee.

3. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees hired after implementation of the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

4. All "New Members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the

normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

G. Retiree Health Plan

1. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account.

2. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

3. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

4. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

H. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000.

I. Disability

The City shall provide major disability coverage with benefits calculated at 66 2/3% of the base monthly wage or salary less deductible benefits. Disability benefits shall also be provided to job share employees.

J. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code sections 125 and 129. The Association agrees the City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

Article 18 – Leaves

A. Vacation Accrual/Usage

Employees shall accrue vacation credits as follows:

Years of Service	Employees on Schedule A	Employees on Schedule B
1 through 3	80 hours	120 hours
After 3 through 7	120 hours	160 hours
After 7 through 10	136 hours	160 hours
After 10 or more	160 hours	200 hours

Employees may not accrue more than eighty (80) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. Example: an employee with two (2) years of service earns eighty (80) hours of vacation. However, in this example the employee may accrue up to one hundred and sixty (160) hours of vacation at any one time.

The time during a calendar year at which an employee may take his/her vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City. Should special circumstances preclude the employee from using enough vacation to remain below the maximum limits stated above, the employee shall be paid for vacation earned in excess of the cap on

accrual. Payment shall be made during the pay period in which the vacation is earned and at the employee's base rate of pay.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination.

Illness while on paid vacation will be charged to Sick Leave rather than vacation only if:

The employee notifies his or her supervisor within four (4) calendar days of the beginning of the illness or prior to the end of his or her vacation leave, whichever is sooner, to request that his or her illness on vacation be charged to Sick Leave.

The department shall be under no obligation to extend the vacation beyond the original scheduled vacation ending date.

Whenever practicable, an employee may use compensatory time combined with vacation time when requesting specific vacation periods.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or the designated department contact prior to or within one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the director of his/her department. When absence is for one (1) work day or more, the employee may be required to file a physician's certificate with the Personnel Officer.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

D. Personal Sick Leave Conversion

1. Regular employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of one-hundred and sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. One hundred and sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave credits to vacation credits. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of one-hundred and sixty-eight (168) hours at the ratio of eight (8) vacation hours for every sixteen (16) sick leave hours.

2. Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Association's Retiree Health Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the RHS shall occur as follows:

- The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

3. Upon separation from the City, regular full-time employees must convert hours into their respective individual accounts in the Association's Retiree Health Savings Plan, as follows:

- The City will convert unused personal sick leave in excess of 168 hours into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave in excess of 168 hours into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years, but not more than 15 years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- The City will convert unused personal sick leave in excess of 84 hours into the Retiree Health Savings Plan for regular full-time employees with at least fifteen (15) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's base salary rate.

- For any regular full-time employee who separates with at least ten (10) years consecutive full-time employment and has at least 250 hours of accrued sick leave at the time of separation, the City will convert all unused personal sick leave hours at the ratios described in Section D.3 above into their

respective individual accounts in the Association's Retiree Health Savings Plan.

This section shall not apply to employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause.

E. Personal Leave

Effective the pay period which includes January 1st of each year, regular and probationary employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Upon request, employees shall receive necessary time off with pay, not to exceed forty (40) hours in any one (1) instance, to arrange for or attend a funeral of a member of their immediate family. For purposes of this Section, immediate family shall mean father, father-in-law, mother, mother-in-law, step-parent, brother, sister, step-brother, step-sister, wife, husband, registered domestic partner, child, step-child, grandparent, grandparents in-law, grandchild, legal guardian or other individual whose relationship to the employee is that of a dependent a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed one-hundred and eighty (180) calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence to his/her Department Director of the birth or adoption of the employee's child. The City will comply with all elements of parenthood leave under the Family Medical Leave Act (FMLA) and the California Family Rights Act (CFRA). Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Jury Duty

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours, he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If a unit member is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

I. Military Leave

An employee shall be entitled to such benefits as are provided in the law. An employee requesting such military leave shall present a copy of his/her military orders to his/her Department Director prior to the beginning of the leave.

J. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

1. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

2. The employee shall accrue sick leave or vacation leave during the term of the Industrial Accident Salary Continuance;

3. The employee's condition is not permanent and stationary as determined by the City appointed doctor.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine. Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

K. Administrative Leave

Effective the first pay period beginning in January of each year, employees in Schedule B of Attachment I will receive twenty (20) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis during the calendar year for new employees entering Schedule B of Attachment I during the calendar year. Administrative Leave must be used by the end of the calendar year. Such hours shall not be accrued from year-to-year or paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 20 hours.

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

Article 19 – Holidays

A. Administration of Holidays

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours pay for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay. If a holiday falls on an employee's regularly scheduled day off, the employee may take off another day during the workweek with approval of his/her supervisor.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation in the form of overtime (one and one-half times the employee's hourly rate) for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted compensatory time off, in lieu of pay, within the pay period in which the holiday falls. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below in subparagraph B of this Article.

B. Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

Article 20 - Educational Reimbursement/Professional Development

Employees covered by this Agreement shall be eligible for reimbursement for approved education or professional development expenses as set forth in City policy up to a maximum of $1,300 per calendar year.

For employees in classifications listed on Schedule B, a maximum of $500 of the employee's annual professional development funds may be for the following expenses:

1. Up to $250 towards supplementing un-reimbursed expenses for their annual physical examination, subject to the provisions of Article 21 of this MOU and Article 24 of the City's Personnel Rules and Procedures. The employee may apply any unused amount of this $250 towards travel, hotel and meal expenses for City-approved conferences, seminars and/or job-related training to supplement subsection 2 of this Article.
2. Up to $250 towards travel, hotel and meal expenses for City-approved conferences, seminars, and /or job-related training.

Article 21- Annual Physical Examination

The City shall reimburse up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 22- City Manager Award for Employee Achievement

Management may recommend an employee achievement program, which will provide financial awards to regular full-time, and regular part-time City employees, including members of the IPEA. The program is more fully explained in a policy/procedure titled City Manager's Award for Employee Achievement. An amount for funding levels and awards will be considered on an annual basis by the City Council.

Article 23- Promotions

It shall be the City's policy to recruit the best qualified persons available regardless of race, religion, color, creed, national origin, sexual preference, sex, or disability unless sex or physical ability is a bonafide occupational qualification.

While recognizing the need for introduction of persons from outside City employment at all levels, the policy of the City is to promote employees already employed by the City when their personal qualifications, training, work performance, and work experience are determined to be comparable to applicants from other outside sources.

The Personnel Officer shall determine whether a recruitment shall be open or promotional, on the basis of assuring an adequate number of applicants with appropriate skills to constitute a competitive merit process.

An open selection process shall be held for all position vacancies in each class and class series. However, a promotional selection process may be utilized when the Personnel Officer, after review with the Department Director, determines such a process is in the best interest of the City.

When appropriate, vacancies within this bargaining unit may be filled by promotion or transfer of probationary or regular employees or other employees at the discretion of the appointing authority. Such promotion/transfer shall be based on competitive examination and may include one (1) or more of the selection techniques set forth in the Personnel Rules and Procedures and measures of qualifications as may be determined by the Personnel Officer.

Article 24 – Classifications

Positions classified at the assistant and associate levels will be indicated as "flexibly staffed" positions as provided in the City's Personnel Rules and Procedures.

Article 25 - Layoff and Recall

Whenever in the judgment of the City Council, it becomes necessary for lack of work or lack of funds, or because the necessity for a position no longer exists, the City Council may abolish any position or employment in this bargaining unit. The employee holding such position may be laid off without the right of appeal. The IPEA will receive a copy of the "Proposed Order of Layoffs" of IPEA positions.

When a position with a department or division is abolished as is provided in Section II. G-110 of the City Code, the following general procedure shall be observed:

A. The order of layoff shall be established by the Personnel Officer or his/her designee. He/she shall list all employees in the affected classification(s) using the employee's modified seniority.

An employee's seniority is modified for purposes of establishing the order of layoff using the two most recent performance evaluation ratings for seniority demerits and the one most recent annual performance evaluation ratings for seniority merits:

Number of Ratings	Level of Rating	Modification to Seniority
1	Does not receive a minimum of Accomplished Standards rating	Subtract 1 year
2	Does not receive a minimum of Accomplished Standards rating	Subtract 3 years
1	Outstanding	Add 1 year

B. The order of layoff will begin with the employee(s) with the least modified total seniority. When the modified total seniority ranking is the same, the Appointing Authority shall take past performance evaluations and the needs of the City into consideration.

C. Prior to the establishment of the order of layoff, the Personnel Officer or his/her designee shall furnish all employees proposed to be included on the layoff list with a copy of the "Proposed Order of Layoff" and a copy of any materials not otherwise available to the employee which were relied upon by the Personnel Officer or his/her designee in establishing the employee's position thereon. If the employee wishes to contest the application of the criteria set forth in this policy to his/her position on the list, the employee may request an opportunity to present his/her case to the Personnel Officer or his/her designee within seven (7) calendar working days following the establishment and distribution of the "Proposed Order of Layoff" list and supporting materials. After meeting with all employees wishing to be heard with respect to their position on the layoff list, the Personnel Officer or his/her designee shall establish the "Final Order of Layoff list." The decision of the Personnel Officer or his/her designee shall be final and not subject to the grievance process.

D. No employee shall be laid off from his/her position in any department while an emergency, temporary, provisional, regular part-time or part-time, or contract employee is serving in the same classification in the same department. Employees to be laid off shall be given at least fourteen (14) calendar days' notice.

E. An employee who receives a final layoff notice under the provisions of this policy who holds regular full-time status may, within seven (7) calendar days of receipt of the layoff notice, request demotion to a position within the employee's classification series for which the employee possesses the minimum qualifications providing the position remains a budgeted position. In that event, the employee's position on the layoff list shall be reevaluated as though the employee is in the new classification utilizing the same criteria established for the original list.

F. The names of employees laid off or demoted in lieu of layoff shall be placed upon reemployment lists for eighteen (18) months for those job classes requiring basically the same qualifications, duties, and responsibilities of the class from which layoff or demotion

in lieu of layoff was made. At the time the employee is laid off or demoted in lieu of layoff, the employee shall receive a list of job classes requiring basically the same qualifications, duties, and responsibilities of the classes from which layoff or demotion in lieu of layoff was made.

G. Persons whose names are placed on reemployment lists , and who are re-employed within the prescribed period, shall be regarded as having been on "unpaid" leave of absence during this period and will resume accruals of vacation, sick and other leaves in accordance with this Agreement.

H. In the event a member of the IPEA bargaining unit is laid-off from his/her employment with the City, without the opportunity to voluntarily demote into a lower position or transfer into a comparable position in the City, due to the contracting-out of a City service, the City will provide a severance. The severance shall be equivalent to forty (40) hours of pay, at the current base hourly rate of pay, for every year of full-time City service rounded to the closest full year of service. Additionally, the City will provide a one-time cash equivalent payment for continuing health insurance premiums, using the individual's current elected coverage levels and insurance providers, payable through the end of the month in which the severance expires.

For example, an individual with seven (7) years and seven (7) months of City service would receive eight (8) weeks, or 320 hours, of pay and three (3) months cash equivalent of health insurance premiums.

Article 26 – Seniority

Seniority shall be defined as the total amount of actual continuous service as a full-time employee, excluding approved leaves of absence without pay in excess of thirty (30) calendar days, including leave of absence for service in the Armed Forces of the United States. Seniority will be a factor when considering promotions, transfers, and layoffs.

An employee who is not a full-time employee shall not lose any previously accrued seniority by virtue of the employee having a status other than that of a full-time employee; however, no seniority shall accrue during any period of time in which an employee is on an approved leave without pay in excess of thirty (30) days, or during any period of time in which an employee has a City employment status other than that of a full-time employee or a job-sharing employee.

An employee shall only be entitled to a fifty percent (50%) seniority accrual (i.e., seniority shall be accrued at the rate of one day of seniority for each two days of service) during any period of time in which an employee is classified as a job-sharing employee.

Article 27 – Safety

The City shall provide and maintain a healthy and safe place of employment. No employee shall be required to work under conditions dangerous to the employee's health and safety. The City shall provide and maintain all safety equipment and comply with all health and safety laws and regulations necessary for employees to perform their jobs in a safe manner. Employees shall report unsafe practices, equipment or conditions to their supervisors.

IPEA shall have the right to appoint a voting member to the City Safety Committee.
Any employee has the right to request a Safety Committee review of workplace conditions in written form. The Safety Committee will investigate employee requests for review of worksite conditions and make recommendations to reduce or eliminate the concern. A report of findings shall be provided to the employee within sixty (60) calendar days from receipt of written concern. The secretary of the Safety Committee shall forward a copy of all regular meeting minutes to the Secretary of IPEA on a regular basis. The Safety Committee shall meet on a monthly basis unless the Safety Committee deems otherwise.

Article 28 - Safety Gear and Inclement Weather Gear

Steel-toed shoes and safety glasses will be provided to employees whose regular duties require their usage. Rain gear will be provided to employees whose regular full-time duties require them to work outside on a continuous basis in adverse weather elements.

Article 29 - Personnel Files

The official personnel file for each City employee shall be maintained by Human Resources. Employees have the right to review their official personnel file in Human Resources by scheduling a specific date and time, at least twenty-four (24) hours in advance, with Human Resources staff. A copy of any commendations, written warnings or reprimands, disciplinary

actions, Personnel Action Forms and performance reviews placed in the employee's personnel file will be provided to the employee. The employee shall have an opportunity to respond in writing to documents placed in the file. This response will be filed with the original document.

Written reprimands shall be retained at least one (1) year. If after one (1) year no similar or other unacceptable behavior is reported, the employee may request in writing that the reprimand be purged from his/her file. Upon review and approval of the Department Director, the written reprimand shall be removed from the employee's file.

Article 30 - Child Care

It is understood that twenty percent (20%) of the enrollment of the Irvine Child Care Center will be made available to children of City of Irvine employees subject to availability of openings within the facility at the cost of the employee.

Article 31- Provisional Appointment/Probationary Period

In the case of a current full-time employee in an IPEA-represented class receiving a provisional appointment, (i.e., moving to a position where there is a vacancy – Acting for current employees and Interim for employees hired from outside the City) such provisional appointment shall not be made for a period of less than twenty-eight (28) calendar days. If the provisional appointment is to a position in another bargaining unit or to a classification listed on Schedule B, the employee shall not be entitled to the following changes in compensation and benefits: Annual Physical Examination reimbursement, Retiree Health Voluntary Employees' Beneficiary Association (VEBA) plan, and health plans, including psychological.

The probationary period is six (6) months of actual and continuous service unless otherwise extended under the Personnel Rules and Procedures**.**

Article 32 - Non Discrimination

Neither party to this Agreement shall discriminate against any employee on the basis of any legally protected status enumerated under the law. The parties further agree that they shall not interfere with, intimidate, restrain, coerce, or discriminate against any employee in his/her free choice to participate or not participate in the activities of and the right to join IPEA.

Article 33 - Contracting Out

The City will notify IPEA in writing at least fourteen (14) calendar days in advance of entering into any contract which will result in a reduction in regular hours of existing employees in classifications set forth in Attachment I; provided, however, nothing herein shall limit the City's right to contract out beyond that notice. If IPEA feels that an impropriety has occurred regarding contracting out, IPEA may contact Human Resources in writing and the situation will be investigated.

Article 34 – Severability

It is understood and mutually agreed that this Agreement is subject to all applicable Federal, State, and City laws and ordinances.

If any provision of this Agreement is determined to be invalid or illegal by a court of competent jurisdiction, such provisions will not be deemed valid and shall be severed from this Agreement, except to the extent permitted by law, but the remainder hereof shall remain in full force and effect. Should any change be made in any State or Federal law, or in any rules and regulations implementing such legislation, or in any City Charter provision that would be contrary to any provision contained herein, then such provision shall be automatically terminated but the remainder of this Agreement shall remain in full force and effect.

The Parties hereto shall meet and confer within a reasonable time for the purpose of replacing any provision of this Agreement determined to be invalid or illegal pursuant to this paragraph.

Article 35 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppage, the IPEA hereby agrees that during the term of this Agreement, neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature

against the City whatsoever, or wheresoever located, including, but not limited to, disputes which are related to the subject matter contained in this Agreement; disputes which are specifically not subjects of this Agreement; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, IPEA and its officers will take steps reasonably within their control to end or avert the same.

Those represented by the IPEA will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by IPEA found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to Personnel Rules and Regulations.

Article 36 – Term

The terms and conditions of this Agreement will be effective August 11, 2017 unless otherwise stated in the Agreement. This Agreement shall remain in full force and effect until June 30, 2019 and shall supersede all other Agreements between the parties.

.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the 11th day of August, 2017.

CITY OF IRVINE	IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION
By:	By:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Attachment I
CLASSIFICATIONS REPRESENTED BY
IRVINE PROFESSIONAL EMPLOYEES ASSOCIATION

SCHEDULE A (Non-Exempt Employees)

Classification	Pay Grade
Assistant Engineer	10
Assistant Planner	9
Assistant Transportation Analyst	9
Associate Planner	11
Associate Transportation Analyst	12
GIS Analyst	10
Grants Coordinator	11

SCHEDULE B (Exempt Employees)

Classification	Pay Grade
Accountant	10
Assessment District Engineer	17
Associate Engineer	13
Associate Plan Check Engineer	13
Engineering Geologist	14
Right-of-Way Administrator	15
Senior Accountant	12
Senior Civil Engineer	16
Senior GIS Analyst	12
Senior Plan Check Engineer	16
Senior Planner	13
Senior Project Manager	14
Senior Transportation Analyst	14
Senior Transportation Engineer	16
Water Quality Administrator	15

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF IRVINE AND THE IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), AND SUPERSEDING ALL PREVIOUS IPMA MEMORANDUMS OF UNDERSTANDING, EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine (City) and the Irvine Police Management Association (IPMA) have met and conferred in accordance with the requirements of the Meyers-Milias-Brown Act and City Council Resolution No. 341; and

WHEREAS, the City and IPMA have reached agreement on wages, benefits, hours, and other conditions of employment for the period of August 11, 2017, through June 30, 2019; and

WHEREAS, a previous Memorandum of Understanding between the City of Irvine and the IPMA was adopted by the City Council pursuant to Resolution No. 16-46.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE that the 2017-2019 Memorandum of Understanding, attached hereto as Exhibit A, between the City and IPMA is approved and adopted. The compensation policy provided for by this resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT 4

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE



MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE POLICE MANAGEMENT ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 – JUNE 30, 2019

EXHIBIT A

IRVINE POLICE MANAGEMENT ASSOCIATION

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MEMORANDUM OF UNDERSTANDING

BETWEEN

IRVINE POLICE MANAGEMENT ASSOCIATION

AND

CITY OF IRVINE

AUGUST 11, 2017 TO JUNE, 2019

PREAMBLE

This Memorandum of Understanding, hereinafter referred to as the "Agreement" or "MOU," entered into by the CITY OF IRVINE, herein referred to as "City," and the IRVINE POLICE MANAGEMENT ASSOCIATION (IPMA), hereinafter referred to as the "Association," has as its purpose the promotion of harmonious labor relations between the City and the Association, establishment of an equitable and peaceful procedure for the resolution of differences and the establishment of rates of pay, hours of work, and other conditions of employment.

Article 1 - Recognition

The Association is the exclusive representative of the classifications of Police Commander and Police Lieutenant.

Article 2 - City Rights

Except as expressly limited by this MOU or other applicable laws, the City retains the exclusive right (a) to direct employees of the Police Department; (b) to hire, promote, transfer, and assign employees to positions within the Department consistent with applicable classifications; (c) to dismiss employees because of lack of work; (d) to reprimand, demote, suspend or discharge employees; (e) to determine the mission of the Department, its budget, its organization, the number of employees and the methods and technology of performing its work; (f) to take whatever action may be appropriate to carry out its mission in situations of emergency. The parties further understand that all

rights not clearly and expressly limited by this MOU are expressly reserved to the City, even though not enumerated.

Article 3 - Employee Rights

Safety employees covered under this Agreement shall be entitled to all rights specified under Government Code Section 3300 et seq., and Irvine Police Department Procedure relating to "Public Safety Officers Procedural Bill of Rights." Employees shall have the right to have documented disciplinary actions or other adverse documented incidents removed from their personnel files pursuant to Police Department Procedure 2.02.17. No employee shall be interfered with, intimidated, restrained, coerced, or discriminated by the City because of his/her exercise of these rights.

Article 4 - Association Rights

A. Payroll Deductions - The City agrees to continue payroll deductions to Association on behalf of its members for dues, and/or any insurance plan sponsored by the Association, unless authorization to make such deductions is canceled in writing by the individual employees.

B. Release Time for Association Business - In order to allow the Association an opportunity to handle the business affairs of its members, including handling of grievances, the City shall, at the beginning of each contract year, establish the annual time bank specified below for Association use, to be used as authorized by the Association President, as the chief executive officer of the Association, and, in his absence, the Secretary. The Association agrees, however, that the effective operations of the Police Department are not to be adversely affected by the use of the time bank by the Association members. If the Association members' absence does not impact staffing or other vital departmental operations as determined by the Chief of Police, the employee shall be released without restrictions. It is also understood that time for the annual meet and confer preparation and meetings and/or any special meetings called by the City shall not be charged against the time bank. It is also understood that hours from the time bank will not be carried over from year to year. The time bank will be a maximum of 200 hours per year for all Association business related to the Police Management unit.

Article 5 - Grievance Procedure

A. Matters Subject to the Grievance Procedure

A grievance may be filed for the alleged violation of any Personnel Rule and Regulation dealing with required subjects of bargaining that are not specifically reserved to the City in the City Rights clause, Article II; for an alleged violation of an express provision in the MOU; or alleged violation of established and commonly accepted safety practices or procedures. The grievance procedure shall not be used to establish new policies or change any existing rules and regulations. It shall not be used in connection with disciplinary actions or other matters for which appeals procedures exist under the Personnel Ordinance, Personnel Rules and Regulations, or pursuant to statute.

B. Informal Grievance Adjustment

An employee who has a complaint should try to solve the problem through informal discussion with his/her immediate supervisor without delay, and in no event later than fourteen (14) calendar days after the event giving rise to the complaint. The immediate supervisor shall make whatever investigation he/she deems necessary and reply within fourteen (14) calendar days**.** If the employee is not satisfied with the decision reached through the informal discussion, and/or some other extenuating circumstances exist, he/she may bring the matter to the attention of the next level of authority within fourteen (14) calendar days of such decision. If the employee is still not satisfied with the decision, he/she may file a formal grievance within fourteen (14) calendar days after having received the reply**.**

In incidents involving an employee group, a representative of the involved group may meet with a designated representative of the City in an informal attempt to resolve the matter. Employees have the right to authorize the Association to represent them in any grievance under this provision, informal or formal**.**

C. Formal Grievance Procedure

1. First Level

The formal grievance procedure may be followed on matters subject to this procedure only after failure to resolve a problem through informal grievance adjustment. If, after this discussion, the employee is not in agreement with the decision reached, he/she may, within fourteen (14) calendar days, file a formal grievance in writing to the Police Chief with a copy to the Personnel Officer (i.e., the Assistant City Manager or his/her designee, setting forth the section(s) of the MOU or Personnel Rules and Regulations allegedly violated and reciting all the facts and circumstances constituting the claimed violation. The department director shall make whatever investigation he/she deems necessary to allow fair consideration of the situation and shall present a written reply to the employee within fourteen (14) calendar days after receipt of the grievance. A copy of the reply shall be forwarded to the Personnel Officer.

2. Second Level

In the event the grievant is not satisfied with the decision at the department director level, the grievant may appeal the decision to the Personnel Officer or his/her designee, within fourteen (14) calendar days of receipt of the decision. This written appeal statement should include a copy of the original grievance, the decision rendered at the previous level, and a clear, concise statement of the reasons for the appeal. The written appeal described herein shall not expand the scope of the formal grievance submitted to the department director.

The Personnel Officer or his/her designee shall communicate a decision within fourteen (14) calendar days after receiving the appeal. Either the grievant or the Personnel Officer may request a personal conference within the foregoing limits to discuss the grievance. Either party may have a representative present at such a conference.

3. Third Level

If the grievant is not satisfied with the decision by the Personnel Officer and the grievance alleges violation of the MOU, he/she may request the Association to submit the grievance to advisory arbitration, or appeal directly to the City Manager.

a. Advisory Arbitration

If the Association concurs with the employee request for advisory arbitration, the Association shall within twenty-eight (28) calendar days of the Personnel Officer's decision submit a request in writing to the Personnel Officer for advisory arbitration of the dispute and the City shall comply with the request, except in cases of disputed arbitrability. The Association and the City shall attempt to agree upon an arbitrator and if no agreement can be reached, the parties shall request the State Mediation and Conciliation Service to supply a panel of seven (7) names of persons experienced in hearing grievances for cities. Each party shall alternately strike a name until only one name remains. The remaining panel member shall be the Advisory Arbitrator. The party who strikes first shall be determined by mutual agreement or by flipping a coin.

The fees and expenses of the arbitrator and the hearing shall be borne equally by the City and the Association. All other expenses, including fees and costs for witnesses and representatives, shall be borne by the party incurring them.

The Advisory Arbitrator shall, as soon as possible, hear evidence and render a decision on the issue or issues alleged in the grievance that were submitted to advisory arbitration. If the parties cannot agree upon the issues for the arbitrator to decide, the arbitrator shall determine the issue(s) to decide based on the grievance and other

evidence submitted by the parties including the responses at the lower levels. In cases where the City contends that the grievance submitted is not arbitrable, the Advisory Arbitrator shall rule on the arbitrability of the issues.

The arbitrator shall have no power to add to, subtract from, or modify the terms of this Agreement or City policy.

After a hearing and after both parties have had an opportunity to make written arguments, the Advisory Arbitrator shall submit, within thirty (30) calendar days, to all parties, the written findings and advisory recommendations that he/she has prepared.

The City Manager has the power to render a final decision of a grievance which shall be binding on ALL parties. If, upon review, the City Manager determines that he/she is unable to render a final determination on the record, he/she may reopen the record for the taking of additional evidence prior to rendering the binding decision. Said decision of the City Manager shall be provided to all parties within thirty (30) calendar days of his/her receipt of the Advisory Arbitrator's findings and recommendations.

b. City Manager Review

If the Association does not concur with the employee request for advisory arbitration, the employee, within thirty-five (35) calendar days of the Personnel Officer's decision may request and shall be granted a hearing by the City Manager which will be closed to the public but open to all parties at interest for final resolution of the grievance.

In instances where the City Manager hears a grievance he/she shall conduct such hearings which will be closed to the public but open to all parties in interest as he/she may deem necessary and shall render a

final and binding decision within thirty (30) calendar days following the conclusion of the hearing.

D. General Conditions

1. The Personnel Officer shall receive and retain copies of all written materials pertaining to the grievance.

2. At any step of the informal grievance adjustment or formal grievance procedure, a department director, supervisor, or employee may request a representative of Human Resources to participate in any discussions which may take place. Grievances may be initiated by the concerned employee or the Association.

3. A formal grievance, not involving a specific supervisor or department director, may be submitted directly to the Personnel Officer.

4. An employee may represent himself/herself or select whomever he/she desires to represent him/her in the grievance procedure.

5. If an employee fails to proceed with a grievance within any of the time limits specified in this policy, the grievance shall be deemed settled on the basis of the last decision reached.

6. If management fails to respond within any of the time limit specified in this policy, the employee may proceed to the next level as if management responded on the last day possible.

7. An extension of the time limits specified in this process may be provided when mutually agreed upon by all parties concerned.

Article 6 - Disciplinary Action

A. Disciplinary Authority

The department director shall have the right, for reasonable cause, to demote, dismiss, reduce in pay or suspend without pay for up to thirty (30) calendar days any regular member of the unit. An appeal process for "punitive action" other than a demotion, dismissal, reduction in pay or suspension is included as Attachment VIII to this MOU.

B. Discipline Procedure

The department director or designee proposing that action be taken shall provide the employee with written notice of the proposed action. The written notice shall contain the date it is intended to be effective, the charge(s) and facts on which the proposed action is based and notification that the employee is entitled to respond to the charges orally or in writing to the department director or designee within seven (7) calendar days of receipt of notification. Failure of the employee to make a written or oral response or request will constitute waiver of the right to respond. Further, the employee shall be provided with the relevant written materials, written reports and documents considered by the department director or designee in reaching his/her decision to propose the action.

If, the employee elects to respond in person, a meeting shall be scheduled with the department director or designee to whom the employee shall be given the opportunity to respond to the proposed action. Subject to the provisions of Government Code section 3303(i), the employee shall be entitled to be represented by counsel or other person of his/her choosing at the meeting.

If after following the above procedure discipline is implemented, a written notice of discipline shall be served upon the employee. Said notice shall inform the employee of his/her appeal rights, if any.

The director will hear employee responses to all contemplated disciplinary actions, which propose a penalty equal to or more severe than a forty-hour suspension without pay.

The City shall have the right to put any employee on immediate paid administrative leave pending investigation and processing of any potential disciplinary action.

The provisions of this Article shall not apply to reductions in pay, which are part of a general plan to reduce salaries and wages or to eliminate positions.

C. Appeal

1. Right of Appeal:

When formal disciplinary action has been taken by the department director or designee and the employee has received written notification of the action, the employee shall have the right to appeal as provided below. Failure to appeal by the employee or his/her representative will make the disciplinary action final and conclusive.

2. Appeal Procedure:

An employee who has passed initial probation who has been demoted, dismissed, reduced in pay or significantly suspended without pay, may appeal to the City Manager within fourteen (14) calendar days after having been furnished with a copy of the notice of discipline by filing a written answer to such charges and requesting a hearing thereon.

It is expressly understood that separation due to involuntary retirement for disability shall not be considered discipline for the purpose of this Article. Procedures for contesting separation due to involuntary retirement shall be as set forth in the City's Defined Benefit Retirement Plan for employees covered by that plan.

3. Hearing Procedure:

a. The City Manager shall appoint a Hearing Officer to conduct hearings on appealable disciplinary actions imposed pursuant to this Article.

b. Hearings shall be conducted in the manner most conducive to determination of the truth, and the Hearing Officer shall not be bound by technical rules of evidence.

c. The Hearing Officer shall determine the relevancy, weight and credibility of testimony and evidence. The Hearing Officer shall base his/her findings on the preponderance of evidence.

d. Each side will be permitted an opening statement and closing argument. The department director shall first present his/her witnesses and evidence to sustain the charges, and the employee will then present his/her witnesses and evidence in defense.

e. Each side will be allowed to examine and cross-examine witnesses.

f. Both the department director and the employee or their respective designees may be represented by legal counsel.

g. The Hearing Officer shall, if requested by either party, subpoena witnesses and/or require production of other relevant records or material evidence.

h. The Hearing Officer may, prior to or during a hearing, grant a continuance for any reason he/she believes to be important to his/her reaching a fair and proper decision.

i. The Hearing Officer shall prepare a recommended decision and forward it to the City Manager after the matter of appeal was taken under submission by the Hearing Officer. The recommended decision shall set forth which charges the Hearing Officer sustains or does not sustain and the reasons therefore.

j. After receiving the recommendation of the Hearing Officer, the City Manager may sustain or reject any or all of the charges filed against the employee. He/she may sustain, reject or modify the disciplinary action invoked against the employee.

k. The employee or his/her representative may obtain a copy of the transcript of the hearing upon request and agreement to pay for necessary costs.

D. Dismissal:

Dismissal of any employee from the competitive service shall, unless otherwise ordered:

1. Constitute a dismissal as of the same date from all positions which the employee may hold in the competitive service.

2. Result in an automatic removal of the employee's name from all employment lists on which it may appear.

3. Terminate the salary of the employee as of the effective date of his/her dismissal, as indicated in the notice of discipline except that he/she shall be compensated for any unpaid salary, unused vacation and unused compensatory time off to his/her credit as of the date of dismissal.

Article 7 - Wages

Salary Adjustments

The salary ranges of classifications covered by this Agreement shall be as set forth in the Schematic Arrangement of Class Titles and Salary Ranges as shown on Attachment I.

Effective the pay period that includes September 1, 2017, the base salary of employees in this bargaining unit shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the base salary of employees in this bargaining unit shall be increased by percent (2.0%).

Salary Upon Promotion to Lieutenant

When a Sergeant promotes to Lieutenant, the employee's salary on promotion will be calculated as an eight percent (8%) increase over the employee's current base pay plus any P.O.S.T pay per the IPA MOU the employee is earning at the time of promotion, limited to the maximum of the Lieutenant range.

Management Incentive Pay

Employees in the IPMA Unit shall be eligible to receive 3% management incentive pay above their base salary, in recognition of the unique nature of their work.

Pay for Performance

Upon completion of a written performance review, employees may be eligible for merit adjustments in the following manner.

- Employees whose salary is below the maximum of their salary range, and who receive a "Meets Expectations" performance review, will be eligible for a 3% base salary adjustment up to the maximum.

- Employees whose salary is below the maximum of their salary range, and who receive an “Exceeds Expectations” performance review, will be eligible for a 4.5% base salary adjustment up to the maximum.

- Employees whose salary is below the maximum of their salary range, and who receive an “Outstanding” performance review, will be eligible for a 6% base salary adjustment up to the maximum.

- Employees whose salary is near the maximum of their salary range, and who receive a “Meets Expectations” or “Exceeds Expectations” or “Outstanding” performance review, will only receive that portion of the pay increase which increases their base pay up to the maximum of the salary range.

- Employees who receive a “needs improvement” performance review are not eligible for any salary increase.

- Employees whose salary is at the maximum of their salary range are not eligible for any salary increase.

- The dates for performance reviews and eligibility for merit pay adjustments will be adjusted for unpaid leaves of absence in excess of thirty (30) days.

Article 8 – Bilingual Pay

The Chief of Police shall designate which positions shall be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $115.00 per month, while serving in such positions and utilizing such designated second language(s).

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.
B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

Article 9 – Special Events Pay

It shall be the responsibility of the Chief of Police to monitor the application of the special events policy, and he has the authority to exercise management rights as outlined in Article II of this Agreement.

The Chief of Police may assign employees covered by this Agreement to work at a special event in a management capacity. Employees working in this capacity shall be compensated at one and one-half times the employee's classification's top range of pay plus professional achievement pay if the City is reimbursed at the employee's rate of pay. Otherwise the employee will be reimbursed at the Lieutenant rate.

Article 10 – Benefits

A. The City shall provide the following as options to the employee for employee and dependent coverage.

Medical

One (1) indemnity medical plan

Two (2) health maintenance organizations (HMO)

Dental

One (1) dental HMO (Guardian)

One (1) group dental PPO (Guardian)

Vision

One (1) vision care plan

The total cost to the City for medical, dental and vision insurance shall not exceed the following per month:

Employee Only	$694.04
Employee plus one	$754.04
Family	$1064.31

The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. To the extent provided by the Internal Revenue Code, any premiums paid by an employee through payroll deductions for insurance coverage described herein shall continue to be paid with pre-tax dollars.

B. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in Article XI, item A, above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in Article XI, item A,

above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014 will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

C. Affordable Care Act Reopener

The City may reopen the MOU on the issue of health insurance solely for the purpose of discussing potential impacts from or modifications to the Affordable Care Act. The City shall make no changes to health insurance benefits or City contributions toward health insurance benefits under the reopener, absent mutual agreement between the City and IPMA.

D. Employees not claiming dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

E. Citywide Insurance Committee

The Citywide Insurance Committee shall be composed of one representative from each of the following: Irvine Police Management Association, Irvine Police Association, Irvine Professional Employees Association, Irvine City Employees Association, Supervisory/Administrative employees, Management employees,

Confidential employees and the Manager of Human Resources who shall be the Chairperson of the Committee.

The functions of the Committee shall be to review coverages, cost containment methods, claims processing service, and claims experience. The committee will be provided with such information and claims history, and proposed changes in rates or coverage.

F. Disability Insurance

1. The City shall provide major disability coverage with benefits at 66- 2/3% of the employee's monthly earnings.

2. Pursuant to the City of Irvine Personnel Policy, the City shall continue to pay for the health, dental and vision (employee only vision) benefits for the first six months for the employee out on long-term disability.

G. Life Insurance

Employees covered by this Agreement shall be provided a life insurance plan in the amount equal to a full year's base salary rounded up to the next $1,000, with a minimum amount of $85,000 and a maximum amount of $150,000.

H. Telecommunication Allowance

Employees shall be provided a $100 monthly allowance for cellular service. In addition, a reimbursement of up to $200 for cellular equipment will be provided upon receipt of invoice initially (following appointment to affected classification) and once every two years thereafter, if necessary to replace existing equipment. All purchases shall conform to the approved list of equipment as determined by the Chief of Police. All contracts for cellular service shall be between the provider and the individual.

I. Flexible Spending Account

The City shall administer a Flexible Spending Account (IRS Code Section 125) to provide employees a mechanism by which they may reduce their salary and pay for eligible expenses with pre-tax dollars. The Association agrees that the City will use

what legal means exist to recover costs for claims paid in advance of sufficient employee payroll deduction being made, upon the employee's separation from the City.

J. Take Home Vehicle

Employees in the unit shall be provided with a take home vehicle to facilitate the ability to immediately respond to after-hours emergencies ensuring the safety of, and reducing any further risk to, the community. California law allows the incidental and minimal personal use of City vehicles. Employee use of his/her take home vehicle to transport a family member(s), or other person(s) who is not an employee of the City, that is minimal in nature and consistent with legal restrictions, is permitted.

Article 11 - Retirement Plan and Retiree Health Insurance

A. Extension of Health Insurance Beyond Retirement

Any employee covered by this MOU who retires and has completed 15 years of service with the City or 10 years of service with the City and has reached the age of at least 50 years, or who has been medically retired at any age, shall be entitled to purchase the medical insurance plan in effect at the time. The employee shall pay the City premium group rates for employee and the employee's dependents, at the cost to the former employee, now retiree.

The spouse of an eligible retired unit member may continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of the retired employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

B. Retiree Health Benefits

1. Employees who previously participated in the Irvine Employees Benefit Trust (IEBT), formerly VEBA, administered by the Irvine Police Association (IPA) shall contribute an amount equal to 3% of the top step police sergeant base salary to the IPA IEBT. Effective the pay period including September 1, 2017,
    a. The City shall contribute on behalf of each employee, an amount equal to 1.25% of each employee's base salary to the IPA IEBT.
    b. The employee shall contribute the difference of the amount listed in Section B1(a) above and 3% of the top step sergeant base salary to the IPA IEBT.

2. All other employees shall contribute an amount equal to 3% of base salary to a Retiree Health Savings (RHS) account. Effective the pay period including September 1, 2017, this 3% contribution amount shall be allocated as follows:

    a. The City shall contribute an amount equal to 1.25% of base salary.
    b. The employee shall contribute an amount equal to 1.75% of base salary.

C. The provisions of section C shall apply to all new employees and to employees, as of February 2, 2002, who elected to waive their rights in the City of Irvine Defined Pension Plan and who elected to transfer to the CalPERS program through the irrevocable election process. All members covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided by the City of Irvine Defined Benefit Pension Plan.

1. The City's contract with CalPERS shall include the following options:
    - 3% at 50 Full Formula for Local Police Safety Members (Cal. Govt. Code Section 21362.2)
    - One Year Final Compensation (Cal. Govt. Code Section 20042)

- Military Service Credit as Public Service (Cal. Govt. Code Section 21024), in which the employee pays the entire cost
- Post Retirement Survivor Allowance (Cal. Govt. Code Sections 21624, 21626 and 21628)
- Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
- Fourth Level 1959 Survivor Benefits (Cal. Govt. Code Section 21574).

All employees hired on or after the effective date of the CalPERS contract (February 5, 2002) shall become members of the CalPERS Retirement Program. Employees who promote into IPMA, who had previously elected to waive their rights to the CalPERS program and remained in the City of Irvine Defined Benefit Pension Plan through the irrevocable election process, shall remain in the City of Irvine Defined Benefit Pension Plan and be covered by its provisions as noted in their former MOU.

Once a member of the CalPERS Retirement Program, such participation shall continue until the employee terminates employment with the City for any reason.

2. All "New Members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the Sworn Tier 3 Plan; 2.7% at 57.

3. <u>Member Contribution</u>

a. All "New Members" hired by the City on or after January 1, 2013 will pay the full employee contribution, which will be one-half the normal cost rate as determined by CalPERS.

b. For employees who are members of the City's 3% at 50 CalPERS plan, the full nine percent (9%) member contribution will be paid by the member,

through pre-tax payroll deduction. The City has adopted the CalPERS resolution in accordance with IRS Code section 414(h)(2) to ensure that the employee contribution is made on a pre-tax basis.

4. Cost Sharing:

All unit members enrolled in CalPERS who are not new members under PEPRA shall contribute an amount through payroll deductions equal to an additional three percent (3.0%) of compensation earnable as cost sharing of the City's required contribution to CalPERS under Government code section 20516(f). These cost sharing deductions shall be made on a pre-tax basis to the extent allowed under applicable law. These employees are responsible for paying an additional pension contribution of three percent (3%) as cost sharing in accordance with Government Code section 20516(f), for a total employee pension contribution of twelve percent (12%). Effective January 1, 2018, to the extent permitted by law, the parties agree that this additional three percent (3%) shall be considered member contribution per Government Code section 20516.5. However, the City shall be under no obligation to amend its contract with CalPERS in order to ensure that the three percent (3%) is treated as employee contribution.

5. Uniform Evaluation

Sworn officer uniforms will be valued annually and shall be expensed for PERS purposes **(**except for "new members" as defined by PEPRA) on a bi-weekly basis. The uniform valuation amount is $25.47 per pay period.

Article 12 - Police Management Professional Achievement Plan Program

1. An employee will be eligible for a seven percent (7%) Professional Achievement benefit upon completion of a California P.O.S.T. Management course. This benefit shall cease if the employee is not eligible and/or does not apply for his/her P.O.S.T. Management Certificate within two years of being promoted.

2. An employee will be eligible for an additional five percent (5%) Professional Achievement benefit upon completing a two-year P.O.S.T Command College or attaining a Master's Degree in Criminal Justice, Sociology, Public Administration, Business Administration, or a related field from an accredited college or university. The five percent (5%) benefit shall be calculated on a base amount that includes the seven percent (7%) benefit described in Section 1 above.

Article 13 – Administrative Leave

Employees shall not be required to charge accrued paid leave accounts or take leave without pay for an absence of less than four hours for personal reasons. Effective the first full payroll period in January of each year, employees will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for Police Management employees appointed into the IPMA unit during the calendar year. Additional Administrative Leave may be approved by the department director or City Manager. Administrative Leave must be used by the end of the calendar year and such hours shall not be accrued from year-to-year or paid off upon termination.

Although an employee will not be required to charge accrued paid leave accounts or take leave without pay for an absence of less than one day, employees who will be absent from work for more than one day, are required to receive approval from the Chief of Police or his/her designee before such leave is taken.

Article 14 – Annual Physical Examination

The City shall reimburse Police Lieutenants and Police Commanders to a maximum of $500 for expenses incurred as a result of an annual physical examination. An annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

Article 15 - Leaves

A. Vacation

Police Commanders and Police Lieutenants shall accrue vacation credits on a monthly basis as follows:

Years of Service	Annual Vacation Credits	Maximum Accrual
1 through 3	120 hours	360 hours
after 3 through 10	160 hours	480 hours
after 10 or more	200 hours	600 hours

"Years of Service" is defined as consecutive, full-time service with the City of Irvine. When an employee earns vacation in excess of the cap on accrual, the employee shall be paid for the vacation during the pay period earned and the employee's base rate of pay. The times during a calendar year at which an employee may take his/her vacation shall be determined by the Chief of Police or his/her designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays occur while an employee is on an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump sum for all accrued vacation leave earned prior to the effective date of termination. Accrued vacation will be cashed out at the final rate of pay, which is base rate plus any Police Management and Professional Achievement Plan incentive pays to the extent that an employee qualifies for the particular incentive pay.

B. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year, an employee may make an irrevocable election to cash out up to forty (40) hours of accrued vacation (in eight hour increments) which will be earned in the following

calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

C. Personal Sick Leave

Employees shall accrue Personal Sick Leave credits at the rate of eight (8) hours per month.

In order to receive compensation while absent on sick leave, the employee shall notify his/her immediate superior or designee two (2) hours prior to the time set for beginning his or her daily duties, or as may be specified by the director of his/her department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer, stating the nature of the illness.

An employee receiving temporary disability payments under the Workers' Compensation Laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain his/her regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

D. Personal Sick Leave Conversion

1. Personal Sick Leave Conversion –Upon honorable separation from service, which includes a disability retirement, a service retirement, or a layoff, a regular employee's sick leave accruals will be converted based on the sick leave conversion schedule shown below:

Years of Service	Conversion Rate
0 through 5	0
5 through 10	33%
10 through 20	50%
20 through 25	80%
25 +	90%

"Years of Service" is defined as consecutive, full-time service with the City of Irvine. Upon separation from the City, the converted value of sick leave accruals will be transferred to the Sick Leave Conversion/Retiree Premium Reimbursement Plan.

2. Upon promotion to an unrepresented sworn position with the City, sick leave over 250 hours will be converted into a Retiree Health Savings Account. Conversion rate is based on years of service as referenced in 1., above.

E. Personal Leave

1. Effective the pay period which includes January 1 of each year employees will receive seventy-two (72) hours of personal leave. Such hours shall not be carried over from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 72 hours. Regular and probationary employees who commence employment with the City or return from an unpaid leave of absence from the City after January 1 will receive twenty-four (24) hours less Personal Leave for every four (4) months the employee is not on paid status with the City.

2. The employee shall notify his/her immediate or designated supervisor of the use of a Personal Leave day at least 24 hours in advance unless circumstances beyond the employee's control prevent such notification.

F. Bereavement Leave

Employees shall receive up to forty (40) hours per calendar year for absence necessitated by the death of immediate family members. Employees who commence employment with the City or return from an unpaid leave of absence from the City after January 1, will receive eight (8) hours less Bereavement Leave for every three (3) months the employee is not on paid status with the City.

The immediate family shall be defined as the spouse, registered domestic partner, children, parents, brothers, sisters, grandparents, parents-in-law, grandparents in-law or other individuals whose relationship to the employee is that of a dependent or a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

Where such death has occurred and upon request of the department director the employee shall furnish satisfactory evidence of such death.

G. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay upon approval from the City Manager not to exceed 180 calendar days per year upon presentation of evidence to his/her department director of the birth or adoption of the employee's child. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

H. Military Leave

An employee shall be entitled to such benefits as are provided by law. An employee requesting such military leave, shall present a copy of his/her military orders to his/her department director prior to the beginning of the leave.

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to 80 hours in a pay period.

Article 16- Holidays and Holiday Pay

The recognized holidays to be observed by the City in each calendar year during the term of this Agreement shall be as follows:

New Year's Day
Martin Luther King, Jr. Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

The City shall determine the actual dates for each of the eleven (11) foregoing holidays. Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner. These provisions shall not apply to employees who work on the following holidays which shall be observed on the actual dates: New Year's Day-January 1; Independence Day-July 4; Christmas Eve-December 24; and Christmas Day-December 25.

Employees required to work without regard to Holidays, shall receive a total of 110 hours Holiday compensation each calendar year for all recognized Holidays listed in this

Article. Holiday compensation shall be paid in the pay period of the recognized Holiday. All Holiday compensation will be paid at an employee's hourly base salary or at one and one-half times his/her base rate as described below in this article.
Employees who work a shift on a holiday which has been designated as such by the City shall receive regular compensation consisting of ten (10) hours of pay at his/her normal salary rate plus compensation at one-and one-half times his/her normal rate for hours actually worked.

Employees who do not work on a holiday shall receive pay for such holidays in an amount equal to their base hourly rate of pay times ten (10) hours provided they are in a paid status for all or a portion of both the regularly scheduled workday immediately prior to the holiday and the regularly scheduled workday immediately after the holiday. To the extent the City is permitted by Title 2 California Code of Regulations, section 571(a)(5) to report holiday compensation to CalPERS it will do so.

Any employee who is either on his/her regularly scheduled days off or who has been assigned the day off on any City holiday will receive the ten (10) hours Holiday Pay, plus time and one-half for any hours actually worked. As provided herein, paid status shall include any lawful absence by the employee for sick leave, family sick leave, personal leave, holiday, vacation, and any other paid leave of absence or time taken for compensatory time off.

Article 17 – Plain Clothes Assignments

Employees working in plain-clothes assignments may (with the provision of receipts) receive up to $300 per year in reimbursement for clothing costs.

Article 18 – Education Reimbursement

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, hotel and meal expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

Article 19 - City Manager's Award for Employee Achievement

Management may recommend an employee achievement program that will provide financial awards to regular full-time and/or regular part-time City employees.

Article 20 - Hours of Work

The employees' work schedule shall be ten (10) hours per day including briefing and lunch, for four (4) days during their FLSA workweek. Management will determine shift starting times and shift configuration under the 4-10 plan.

Article 21- Promotions

A. Promotion to Police Commander and Deputy Police Chief

Employees meeting the minimum qualifications will have the opportunity to seek promotion to the ranks of Police Commander and Deputy Police Chief as vacancies occur at those ranks. The parties agree that the Chief of Police has the right to make a direct appointment to the classifications of Police Commander and Deputy Police Chief without utilizing a recruitment process.

If there are three candidates who meet the minimum qualifications for Police Commander, the City will fill the vacancy with an internal candidate. For the rank of Deputy Police Chief, the City retains the right to fill that vacancy either with an internal or external (from outside the City) appointment.

Article 22 – Layoff

For purposes of determining layoffs/demotions based on a reduced work force, seniority will be determined by total time as a full-time sworn employee of the Irvine Police Department. All other seniority within the department is based on time in grade by classification.

Article 23 - Completion of Meet and Confer Process

Each of the parties hereto agrees that it has had a full and unrestricted right to make, advance, and discuss all matters properly within the scope of meet-and-confer in accordance with State laws and local ordinances and regulations. Except as otherwise provided herein during the term of this MOU, the parties expressly waive and relinquish the right to meet and confer except by their mutual consent with respect to any subject or matter, whether referred to or covered by this MOU or not, even though each subject or matter may not have been within the knowledge or contemplation of either or both the City and Association at the time they met and conferred or executed this MOU, and even though subjects or matters were proposed and later withdrawn. The express provisions of this MOU constitute the only limitations upon the City's rights to determine, implement**,** supplement, change, modify, or discontinue in whole or in part any term or condition of employment or adopt any policy, rule, regulation or practice as the City deems fit and appropriate, provided, however, that the City shall comply with all federal and State laws relating to employee rights, opportunities, and benefits, except for the requirement to meet and confer with regard to such change, alterations, modifications, or exercise of the reserve powers of this MOU, which right has been expressly waived by the Association.

Article 24 - Concerted Activities

Apart from and in addition to existing legal restrictions upon and remedies for work stoppages, the Association hereby agrees that during the term of this MOU and through the completion of labor negotiations or until either party declares impasse , neither it nor its members or agents, representatives or persons acting in concert with any of them, shall incite, engage or participate in any strike, walkout, slowdown, sick-out or other work stoppage of any nature against the City whatsoever, or wheresoever located, including but not limited to disputes which are related to the subject matter contained in this MOU; disputes which are specifically not subjects of this MOU; disputes between the City and other employee organizations, persons or employees; jurisdictional disputes. In the event of any strike, walkout, slowdown, sick-out or other work stoppage or threat thereof against the City, the Association and its officers will take all steps reasonable within their control to end or avert the same.

Those represented by the Association will not authorize, engage in, encourage, sanction, recognize or assist in any strike, slowdown, walkout, sick-out or other work stoppage against the City or picket in furtherance thereof, or participate in unlawful concerted interference in violation of this provision, or refuse to perform duly assigned services in violation of this provision. It is understood that any person represented by the Association found in violation of this provision will be subject to discipline, including termination, as determined by the City Personnel Officer, according to personnel rules and regulations.

Article 25 - Term

The terms and conditions of the MOU will be effective the date of City Council approval of the Agreement unless otherwise stated in the MOU.

The Agreement shall remain in force and effect until June 30, 2019, and supersedes all other agreements between the parties.

CITY OF IRVINE	IRVINE POLICE MANAGEMENT ASSOCIATION
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
By:_____	By:_____
	By:_____
	By:_____
	By:_____
	By:_____
	By:_____
	By:_____

ATTACHMENT I

IRVINE POLICE MANAGEMENT ASSOCIATION
Schematic Arrangement of
Class Titles and Salary Ranges
for Police Lieutenants and Police Commanders (Exempt)

CLASS TITLE	APPROXIMATE MONTHLY EQUIVALENT	APPROXIMATE ANNUAL RATE
	Effective September 1, 2017	
Police Lieutenant	$10,185-14,317	$122,221-171,808
Police Commander	$11,017-15,519	$132,205-186,222
	Effective July 1, 2018	
Police Lieutenant	$10,390-14,603	$124,675-175,240
Police Commander	$11,237-15,829	$134,846-189,946

ATTACHMENT II

CITY OF IRVINE – IRVINE POLICE MANAGEMENT ASSOCIATION TRANSITION AGREEMENT FOR PERS BENEFITS

This Transition Agreement ("Agreement") is entered into effective as of July 1, 2001, by and between the City of Irvine ("City") and the Irvine Police Management Association ("IPMA") pursuant to Article XII of the Memorandum of Understanding ("MOU") between the City and the IPMA effective July 1, 2001. This Agreement sets out details for transition from the existing City Sworn Police Defined Benefit Pension Plan ("City DB plan") to the California Public Employees' Retirement System ("PERS") for providing retirement and related benefits to IPMA represented, active City employees ("IPMA employees") as of January 1, 2002.

BACKGROUND FACTS

A. The City and the IPMA have entered into an MOU under which the City will contract with PERS for PERS to provide retirement benefits to IPMA employees instead of the City providing retirement benefits under the City DB plan.

B. The level and type of benefits that will be provided by PERS to IPMA employees are provided in Article XII of the MOU. The specific benefits are governed by PERS rules and regulations.

C. Under the MOU, the provision of benefits by PERS to IPMA employees is contingent upon a number of events, set out below.

AGREEMENT

The City and IPMA agree as follows with respect to the provision of retirement and related benefits by PERS to active City employees who are represented by IPMA:

1. Agreement Is Part of the MOU

   This Agreement is an integral part of the MOU, and is based on the same consideration that supports the MOU.

2. PERS Benefits are Contingent

   The PERS benefits provided in Article XII of the MOU shall be provided to active IPMA employees only upon the occurrence of all of the following events:

   a. The City and PERS shall enter into an agreement that is reasonably satisfactory to the City for PERS to provide such benefits. The City shall make reasonable efforts to enter into such an agreement by January 5, 2002.

   b. The Irvine Police Association shall enter into an agreement with the City that is substantially the same as this Agreement, for its represented employees, prior to any execution of an agreement between the City and PERS.

   c. A sufficient majority of IPMA employees and other qualified employees elect to participate in PERS instead of the City DB plan to provide retirement and related benefits. The election shall be conducted in accordance with PERS rules and the sufficient majority shall be determined in accordance with PERS rules.

   d. If a sufficient majority elects PERS instead of the City DB plan, each existing IPMA-represented employee is given a one time irrevocable option to waive out of the City DB plan and to instead become a member of PERS for his or her retirement and related benefits. Such option shall be exercised at the time and in the manner established by the City in accordance with PERS rules.

   e. The transfer of appropriate plan assets from the City DB plan to PERS is completed pursuant to an agreement between the City and PERS.

3. Effective Date of Change to PERS

   a. The effective date of the PERS retirement plan shall be January 5, 2002, or as soon thereafter as is practical pursuant to an agreement between the City and PERS.

b. No change shall be effective prior to the date that all elections and choices described herein are completed, all necessary or appropriate agreements have been executed with PERS, and all necessary and appropriate actions taken under such agreements.
c. Prior to the effective date of a change to PERS (if any), the terms and conditions of the City DB plan shall govern the benefits of all IPMA-represented employees. Therefore, for example, the City DB plan shall govern the benefits paid and payable to IPMA employees prior to such effective date for events such as: retirement, death, disability and purchase of service.

d. The City shall expeditiously take all reasonable steps to provide for an effective date of January 5, 2002. However the City and IPMA recognize and acknowledge that PERS has authority over the timeline for implementation and may be unable to act as quickly as is preferred by either the City or the IPMA.

4. Benefits And Other Factors May Be Changed In The Future

a. The optional PERS benefits that will be provided to active IPMA employees are provided in Article XII of the MOU, subject to this Agreement and PERS rules.

b. Except to the extent required by law and subject to vested rights acquired by affected employees, the City does not promise that these PERS benefits, or the benefits provided by the City DB plan, will remain unchanged after the end of the current term of the MOU. The IPMA explicitly acknowledges the limitation set out by this section.

c. Subject to vested rights acquired by employees, other factors that may affect benefits paid from the City DB plan and from PERS may also change in the future, including but not limited to the method of plan governance and the investment strategy and results of each of these plans. The IPMA explicitly acknowledges that such factors may change.

5. Elections Required To Join PERS

a. All active employees represented by the IPMA, and other eligible employees pursuant to rules of PERS, including the current active members of the IPA, will

participate in an election to choose (or not choose) PERS instead of the City DB plan.

b. The election shall occur at the time and place and in the manner prescribed by PERS rules and in accordance with the agreement between the City and PERS.

c. If a sufficient majority (as defined by PERS rules) votes to choose PERS to provide retirement and related benefits, then each IPMA-represented employees shall have the right to individually waive out of the City DB plan and instead transfer to PERS. Such choice shall be allowed only once for any current active IPMA-represented employee and his or her choice shall be irrevocable.

d. Any IPMA-represented employee who transfers to PERS shall have his or her retirement and related benefits provided by PERS pursuant to the provisions of Article XII of the MOU. All factors and other elements that are used to determine the amount and form of benefits payable from PERS shall be as provided by PERS, and shall not be governed by the City DB plan.

e. Prior to any election and any individual choice described in section 5,c above, the City will request that PERS take reasonable steps to provide each IPMA-represented employee with generally relevant information concerning PERS. Each IPMA-represented employee has the individual responsibility, however, to obtain all information that is relevant for his or her benefits and for his or her decision in an election or individual choice. The City expressly disclaims all responsibility for any decision in an election or individual choice made by any IPMA-represented employee with respect to participating in PERS or in the City DB plan.

f. Every employee represented by IPMA who is hired by the City on and after the effective date on which retirement and related benefits are provided to IPMA employees from PERS shall automatically participate in PERS for those benefits and shall not be eligible to participate in or receive any benefits from the City DB plan (or any other retirement plan) of the City.

6. Transfer of Assets to PERS from the City DB Plan
    a. If the conditions required for a transfer from the City DB plan to PERS are satisfied, then the City shall direct the Board of Trustees of the City DB plan to transfer all appropriate assets (except as provided below) of the City DB plan directly from the trust of the City DB plan to the appropriate PERS fund. Such transfer shall occur at the time and in the manner set out by agreement between the City and PERS and in accordance with the PERS rules.

    b. Assets shall be retained in the trust fund under the City DB plan in an amount to pay for benefits accrued to date and reasonably projected to be accrued during the relevant plan members' remaining working lifetime for IPMA employees who choose to remain in the City DB plan.

7. Transfer of Liabilities for Benefits to PERS from the City DB plan
    a. If the conditions required for a transfer from the City DB plan to PERS are satisfied, then any responsibility and liability for retirement benefits will be assumed by PERS according to the provisions of the MOU, PERS rules and the agreement between the City and PERS. For employees who elect to participate in PERS, the City DB plan will no longer be liable for any benefits.

    b. Liabilities for benefits shall be retained by the City DB plan for benefits earned by IPMA employees who choose to remain in the City DB plan.

8. Administration of the City DB plan
    a. Prior to a transfer (if any) of any assets or liabilities from the City DB plan to PERS, the City DB plan shall be governed in accordance with the current plan document, trust document and current practices.

    b. The City shall have full responsibility and authority, as Plan Administrator of the City DB plan, to implement any agreement of transfer of assets and benefit liabilities from the City DB plan to PERS.

c. The Board of Trustees under the City DB plan shall be directed by the City to cooperate to the fullest possible extent with the Plan Administrator, the City, and PERS to transfer and to facilitate the transfer of assets of the City DB plan to the appropriate PERS fund.

d. After the transfer (if any) of assets from the City DB plan to PERS has been substantially completed, the City shall amend the City DB plan to reconstitute the Board of Trustees to consist of one or more persons who can most appropriately (in the judgment of the City) act as trustee for the limited amount of assets remaining in the City DB plan. The City shall also amend the City DB plan to limit the role of the Committee under the City DB plan to making disability determinations in the manner that it currently does.

9. Termination of the City DB plan

Subject to the requirements of federal tax law governing qualified retirement plans, when all liabilities for benefits payable under the City DB plan have been paid or provided for (e.g., by transfer of assets and liabilities to PERS and/or by purchase of an annuity contract from a third party), then the City at its sole discretion may terminate and dissolve the City DB plan. On termination and dissolution, any plan assets that are in excess of liabilities shall revert to the City.

10. Miscellaneous

a. The City, as administrator of the City DB plan and contracting employer under any PERS contract, shall have the responsibility and the authority to take all actions reasonable and appropriate to implement this Agreement, including but not limited to interpreting its provisions.

b. To the extent that conflict exists between this Agreement and the MOU, this Agreement shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

_____

_____

_____ ,2001

IRVINE POLICE MANAGEMENT ASSOCIATION

_____

_____

10-25 , 2001

ATTACHMENT IV

IPMA SIDE LETTER AGREEMENT TO MOU
SALARY ON PROMOTION
CONTRACT PERIOD 7/16/05 – 6/30/07

Effective with the 2005 – 2007 MOU, the following modifications will be made:

For Sergeants promoted to Lieutenant, the salary on promotion will be calculated as an 8% increase over the current base pay plus any Police Management Professional Achievement Program (P.O.S.T.) pay, pursuant to Article XV of the IPA MOU, being earned at the time of promotion, limited to the maximum of the range.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

Rick Rudd

Jan Walden

August 5, ,2005

IRVINE POLICE MANAGEMENT ASSOCIATION

August 3 , 2005

ATTACHMENT VI

IPMA SIDE LETTER AGREEMENT TO MOU
SALARY DIFFERENTIALS
CONTRACT PERIOD JULY 1, 2007 – JUNE 30, 2009

The 2007-2009 Memoranda of Understanding between the Irvine Police Management Association and the City of Irvine contains two references to differentials among the Lieutenant, Commander and Deputy Chief classifications. (Reference Article VIII-Wages and Attachment I).

These provisions are not applicable during this contract period, unless the salary for Deputy Chief is increased in July 2008 to an amount greater than 9.59% over the top of range for Commander.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set out below.

CITY OF IRVINE

Jan Walden

,2007

IRVINE POLICE MANAGEMENT ASSOCIATION

, 2007

ATTACHMENT VII

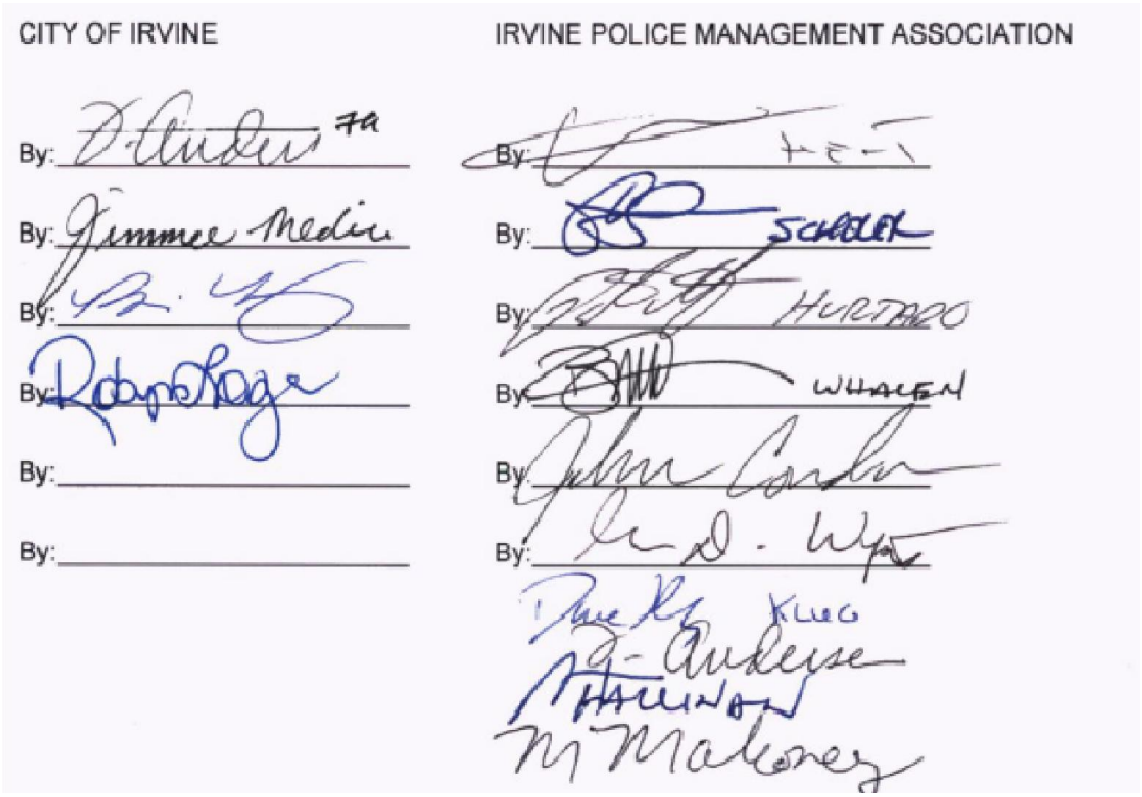
IPMA Side Letter Agreement to MOU
Amendment to Holiday Pay
Contract Period: August 11, 2015 – August 10, 2017
Effective August 11, 2015

Effective with City Council Resolution 16-46, modifications were made to the following MOU Article:

HOLIDAY PAY

The amendment to Article XVIII, Holidays and Holiday Pay enacted on June 14, 2016 in the Memorandum of Understanding between the City of Irvine and Irvine Police Management Association for the time period of August 11, 2015 through August 10, 2017, shall be incorporated in the Memorandums of Understanding for the time periods of:

August 11, 2013 through August 10, 2015
August 11, 2011 through August 10, 2013 (amendment to extend the 2009-2011 MOU)
July 1, 2009 through June 30, 2011



Attachment VIII – Disciplinary Appeals Process

The following administrative appeal process is established pursuant to *Government Code* section 3304.5. This procedure shall not apply to disciplinary actions for which unit members already are entitled to receive an appeal hearing pursuant to Article VI of the this MOU for demotion, dismissal, reduction in pay for disciplinary reasons, or suspension without pay. Moreover, this procedure shall not apply to appeals of punitive transfers, i.e. transfers which are imposed as corrective action following alleged misconduct by officers irrespective of whether a transfer will result in a loss of pay. A transfer which is not expressly intended as corrective action shall not be considered a punitive transfer regardless of whether it results in a loss of pay.

This procedure shall only apply to written reprimands, non-punitive transfers which result in a loss of pay, and any other punitive actions (as that term is defined by *Government Code* section 3303).

1. Right to Administrative Appeal

   A. Any unit member who is subjected to punitive action (within the meaning of *Government Code* section 3303) other than one which may be appealed pursuant to Article VI of this MOU.

   B. The member shall not be entitled to appeal a punitive action prior to its imposition.

   C. A unit member who appeals a punitive action under this procedure shall bear his/her own costs in association with the appeal hearing, including but not limited to any and all attorney fees.

2. Notice of Appeal

   A. Within ten (10) calendar days of being notified of a punitive action, the unit member shall notify the Chief of Police in writing of his/her intent to appeal the punitive action.

B. The notice of appeal shall specify the action being appealed and the grounds for the appeal.

C. Failure to timely serve written notification of an appeal shall result in waiver of any right to appeal.

3. Hearing Officer

A. The Chief of Police shall have ten (10) calendar days from receipt of the notice of appeal to appoint a hearing officer who is not embroiled in the controversy, i.e. a person who did not initiate or directly authorize the action in question.

1. The Chief of Police shall have discretion to appoint an employee of the City or a professional hearing officer, mediator or arbitrator to serve as the hearing officer.

2. The Chief of Police shall have discretion to serve as the hearing officer.

B. The hearing officer shall serve in an advisory capacity and shall be responsible for making recommended findings of fact and issuing an advisory decision to the Chief of Police. The Chief of Police may adopt, modify, or reject the hearing officer's recommendations and advisory decision and the Chief's decision shall be final and binding.

C. If the Chief of Police initiated, or directly authorized the punitive action being appealed, then the Personnel Officer of the City shall assume the responsibilities otherwise assigned to the Chief of Police under this procedure.

4. Burden of Proof/Persuasion

A. If the action being appealed does not involve allegations of misconduct (i.e. allegations that the officer has violated one or more federal, state, or local laws, and/or City or Police Department regulations, procedures, or rules), then the

limited purpose of the hearing shall be to provide the officer the opportunity to establish a record of the circumstances surrounding the action. The Department's burden shall be satisfied if the Department establishes that the action was reasonable, even though reasonable persons might disagree about whether the action was the best one under the circumstances.

B. If the action being appealed does involve allegations of misconduct (i.e. allegations that the officer has violated one or more federal, state, or local laws, and/or City or Police Department regulations, procedures, or rules) the Department shall have the burden of proving by a preponderance of the evidence the facts which form the basis for the charge of misconduct and the burden of persuasion that the punitive action was reasonable under the circumstances.

5. Conduct of Hearing

A. The formal rules of evidence do not apply, although the hearing officer shall have discretion to exclude evidence that is incompetent, irrelevant or cumulative, or the presentation of which will otherwise consume undue time.

B. The parties may present opening statements.

C. The parties may present evidence through documents and testimony. Witnesses shall testify under oath. The oath may be administered by the hearing officer.

D. The parties shall only be entitled to confront and cross-examine witnesses if the punitive action involves charges of misconduct.

E. Following the presentation of evidence, if any, the parties may submit oral and/or written closing argument for consideration by the hearing officer.

6. Record of Hearing

If the punitive action involves an allegation of misconduct, then the hearing may be tape-recorded. The cost to receive a transcript of the hearing shall be borne by the party requesting the transcript.

7. Representation

The unit member may be represented by an association representative or attorney of his or her choice at all stages of the proceedings. All costs associated with such representation shall be borne by the unit member.

The Department shall also be entitled to representation at all stages of the proceedings.

8. Decision

A. The hearing officer should issue his/her advisory decision in writing within fifteen (15) calendar days of the submission of the case by the parties for decision. The written decision shall set forth proposed findings of fact and a proposed decision.

B. Within ten (10) calendar days of receipt of the advisory decision, the Chief of Police should serve the parties with written notice of his/her decision adopting, modifying, or rejecting the hearing officer's recommendations and decision.

If the Chief of Police modifies, or rejects the hearing officer's decision, then he or she shall review the entire record prior to making a decision.

The decision shall be served by first class mail, postage pre-paid, upon the unit member as well as his/her attorney or representative, shall be accompanied by an affidavit or certificate of mailing, and shall advise the unit member that the time within which judicial review of the decision may be sought is governed by *Code of Civil Procedure* section 1094.6.

CITY OF IRVINE

By:_____

By:_____

By:_____

By:_____

By:_____

IRVINE POLICE MANAGEMENT ASSOCIATION

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

By:_____

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR CONFIDENTIAL EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-79 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, revisions have been made to the Classification and Compensation Policy.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. SALARY RANGES

The pay grades of classifications to which confidential employees are assigned shall be as set forth in the Schematic Arrangement of Class Titles and pay grades as shown in Attachment I and be effective the pay period that includes August 11, 2017.

SECTION 2. OTHER COMPENSATION COMPONENTS

Eligible confidential employees shall receive additional compensation benefits as follows:

1. Pension

A. The provisions of this Section 2.1 shall apply to employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

1. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP). Employees shall become fifty percent (50%) vested in such plan upon completion of the probationary period. Thereafter, such vested interest shall increase at the rate of five percent (5%) for every Plan Year in which the employee completes one-thousand (1000) hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

2. The City will deduct an amount equal to 6.552% of each employee's base salary to invest in the City of Irvine DCPP this payroll deduction shall be mandatory fo elected to remain in the City of Irvine DCPP.

3. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present, or future, as provided under Section 2.1.B of this Resolution. Employees, who elected to remain in the City of Irvine DCPP, shall continue

participation until the employee terminates his/her employment from the City for any reason.

4. The City will utilize retirement plan forfeiture funds to offset the City of Irvine DCPP administration and management costs.

B. The provisions of this Section 2.1.B shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

1. The City's contract with CalPERS shall include the following options:

   a. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)

   b. One Year Final Compensation (Cal. Govt. Code Section 20042)

   c. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

   d. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)

   e. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)

   f. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

2. All eligible employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program.

3. All active employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Section 2.1.A above.

4. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

5. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

6. Employer-Paid Member Contributions and New CalPERS Tiers:
   a. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.

b. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

c. All "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will become members of the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

2. Retiree Health Plan

A. 1. For employees in classifications covered by this Resolution and listed in Section A. of Attachment I, the City shall contribute an amount equal to three percent (3%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered in this Resolution.

2. For employees in classifications covered by this Resolution and listed in Section B. of Attachment I, the City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered by this Resolution.

B. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

C. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

3. Health Insurance Benefits

The City shall provide the following options to the employees for employee and dependent coverage, with noted exceptions.

A. Indemnity Medical Insurance
The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

B. Indemnity Dental Insurance
The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

C. Health and Dental Maintenance Organizations
The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

E. Vision Care Plan
One (1) vision care plan.

F. For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological and vision insurance shall not exceed $694.04 per month, per employee, $754.04 per month, per employee plus one (1) dependent or $1,064.31 per month per employee plus family. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections. The cost of the dental enhanced plan, if selected by the employee, shall require employee premium contributions for the amount in excess of the premium for the standard plan.

G. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in item F., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in item F., above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

4. Disability Insurance

The City shall provide a long-term disability insurance plan for employees.

5. Life Insurance

A. For employees listed in Section A of Attachment I:
The City shall provide a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000 for each employee effective the first month following adoption of this Resolution.

B. For employees listed in Section B of Attachment I:
The City shall provide a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000 for each employee effective the first month following adoption of this Resolution.

6. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code Sections 125 and 129. The City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

7. Vacation

A. Employees listed in Section A of Attachment I shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits
1 through 3	80 hours
After 3 through 7	120 hours
After 7 through 10	130 hours
After 10 years or more	160 hours

B. Employees listed in Section B of Attachment I shall accrue vacation credits as follows:

Years of Service	Annual Vacation Credits
1 through 3	120 hours
After 3 through 10	160 hours
After 10 years or more	200 hours

Employees may not accrue more than eighty (80) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The dates an employee may take his/her vacation shall be determined by the Department Director or the designee with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays falls within an annual vacation leave, such holidays shall not be charged as vacation leave but rather as holidays.

Employees who terminate employment shall be paid in a lump-sum for all accrued but not used vacation leave earned prior to the effective date of termination.

8. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

9. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify her/his immediate supervisor or the Personnel Officer prior to or within one (1) hour after the time set for beginning her/his daily duties, or as may be specified by the head of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer or designee.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Manager. An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

10. Personal Sick Leave Conversion

Regular employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of one-hundred sixty-eight (168) hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of 168 hours at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave hours to vacation hours.

Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Retiree Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the RHS account shall occur as follows:

A. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

B. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

   Upon separation from the City, regular full-time employees must convert all remaining sick leave hours into their respective individual accounts in the Retiree Health Savings Plan, as follows:

   1. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

   2. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause shall not be eligible to convert their sick leave into the Retiree Health Savings Plan.

11. Personal Leave

Effective the pay period which includes January 1st of each year, employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

12. Administrative Leave

Effective the first pay period beginning in January of each year, employees in Schedule B of Attachment I will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for supervisory/administrative employees appointed during the calendar year. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not be accrued from year to year or paid off upon termination. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 40 hours.

13. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year. The immediate family shall be defined as mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child, grandparent, grandparents in-law, grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

14. Parenthood Leave

A regular employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the

City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child to the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

15. Education Reimbursement/Professional Development

Regular employees shall be eligible for reimbursement of approved education and professional development expenses to a maximum of $1,300 per calendar year. Up to $500 of the employee's annual professional development fund may be used towards travel, expenses for City-approved conferences, seminars, and/or job-related training. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures. Up to $250 of the employee's annual professional development funds may be used towards supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

16. Physical Examination

The City shall reimburse employees in Schedule B of Attachment I up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination, as defined in Article 24 of the City's Personnel Rules and Procedures. Such annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

17. Holidays

The recognized holidays to be observed by the City in each calendar year shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed.

Regular full-time employees shall receive nine (9) hours pay for each of these holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each of these holidays observed on a regularly scheduled working Friday. Regular full-time employees working an eight (8)-hour, five (5)-day schedule will receive eight (8) hours for each of these holidays. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Employees assigned to work on authorized holidays shall receive regular holiday compensation and compensation for actual hours worked. At the request of the employee, and within the City's ability to maintain appropriate service levels, such assigned employees may be granted equivalent compensatory time off, in lieu of pay, within the pay period in which the holiday falls. If such time is not taken within the pay period, the employee shall automatically receive regular holiday compensation.

Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

18. Overtime Compensation

For employees listed in Section A of Attachment I, hours worked or earned in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at the rate of one and one-half (1 ½) times the employee's hourly rate when such work is authorized by the Department Director and approved by the City Manager.

19. Compensatory Time

Employees listed in Section A of Attachment I may accumulate a maximum of eighty (80) hours compensatory time in lieu of overtime compensation (see 16 above) on the basis of one and one-half (1 ½) hours compensatory time for one (1) hour of overtime work. The time during which an employee may use accrued compensatory time off is subject to approval by the department head or his/her designee with due regard for the wishes of the employee and the need to provide service. However, an employee wishing to use his/her accrued compensatory time off shall provide the City with reasonable notice of such request. Reasonable notice is defined as at least one week. If reasonable notice is provided, the employee's request may not be denied unless it is unduly disruptive to the department to grant the request. A request to use compensatory time off without reasonable notice may still be granted within the discretion of the supervisor or manager responsible for considering the request.

20. Stand-by Time

Regular full-time employees listed in Section A of Attachment I shall receive two (2) hours base salary for each day he/she is required to be available for non-scheduled work assignments. If a City holiday falls on a weekend, employees on standby will receive an additional two (2) hours standby pay for each of these holidays.

21. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

22. Military Leave

Employees shall be entitled to such benefits as are provided by law. An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director or the City Manager prior to the beginning of the leave.

23. Industrial Accident Salary Continuance

In the event that it is determined that a regular full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

A. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

B. The employee shall accrue sick leave and vacation leave during the term of the Industrial Accident Salary Continuance;

C. The employee's condition is not permanent and stationary as determined by the City's appointed physician.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

24. Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

25. Select Benefits Program

The City will provide a cafeteria-style benefit program for confidential employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

B. Employees not claiming any dependents on their medical, dental, psychological and vision plans shall receive $150 per month. The stipend may be taken as taxable cash.

C. Employees who are able to demonstrate to the City's satisfaction that they have minimum essential coverage as defined by the Affordable Care Act, (through another source other than coverage in the individual market, whether or not obtained through Covered California) may opt out of participation in the City's health plan.

26. Wage and Salary Range Adjustment

A. Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

B. Pay progression within a pay grade will be based strictly upon individual performance and summarized in an annual performance appraisal. All

base pay progression within pay grades will be limited to the maximum of a pay grade. Base pay provided according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards and Above	5% base adjustment, limited to maximum of pay grade
Greater than or Equal to Maximum Range		0%

Annual merit increases will be effective on September 1st of each year and will be prospective from that date.

C. Probationary Merit Reviews

Employees on a probationary employment status effective June 30th of each year will not be eligible to participate in the annual review process until they have successfully completed their probationary period. At the completion of the probationary period, the employee will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for probationary reviews will be the same as those for annual performance reviews.

Following the completion of probation, the employee will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the probationary merit review will be pro-rated to reflect only the time period since the completion of the probationary merit review. All subsequent performance reviews will be according to the same merit schedule as other regular employees. If the probationary appraisal has been completed within the months of May and June, the employee's next review will be part of the appraisal schedule in the following calendar year in July.

27. Bilingual Pay Program

Department Directors shall annually designate which positions will be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $50 monthly stipend effective the first working day of the new calendar month following her/her return to work. The employee will not be required to perform bilingual interpretation services during any period in which he/she are not receiving the bilingual pay stipend.

D. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee, who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

   An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

SECTION 3. SEVERANCE

In the event of a lay-off within a designated classification or classification series, the City Manager shall be authorized at his/her discretion to enter into a severance agreement with impacted employees.

SECTION 4. ADMINISTRATION OF COMPENSATION POLICY

The Personnel Officer shall establish procedures for the efficient administration of the compensation policy described in this Resolution.

The City Manager shall approve procedures for movement of an individual employee through salary ranges. Such procedures shall be reviewed annually. All adjustments to the salary ranges contained within this Resolution shall be approved by the City Council.

SECTION 5. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 6.

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT I

CLASS TITLES
FOR CONFIDENTIAL EMPLOYEES

A.	POSITION TITLE	PAY GRADE
	Administrative Secretary	7
	Program Assistant	7
	Administrative Aide	8
	HRIS Specialist	10
	Human Resources Specialist	9
	Program Specialist	9

B.	POSITION TITLE	PAY GRADE
	Administrative Coordinator (c)	9
	Budget Officer	18
	Human Resources Analyst I	11
	Human Resources Analyst II	13
	Management Analyst	11
	Payroll Process Analyst	11
	Payroll Supervisor	14
	Senior Human Resources Analyst	15
	Senior Management Analyst (c)	15
	Human Resources Administrator	18
	Risk Management Administrator	18
	Strategic Business Plan Administrator	18

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES (EXEMPT) OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-80 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, revisions have been made to the Classification and Compensation Policy.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. ANNUAL COMPENSATION FOR MANAGEMENT AND NON-REPRESENTED EMPLOYEES

The pay grades for Management and Non-Represented Employees of the City of Irvine shall be set forth as shown in the applicable salary resolution adopted by the City Council.

SECTION 2. OTHER COMPENSATION COMPONENTS

Eligible exempt Management and Non-Represented employees shall receive additional compensation benefits as follows:

1. Pension:

   A. The provisions of this Section 2.1 shall apply to all employees, as of June 30, 2003, who elected to decline the CalPERS benefits.

      1. The City shall invest an amount equal to 12.448% of each employee's base salary in the City of Irvine Defined Contribution Pension Plan (DCPP) for employees who are actively employed in the unit on or after this Resolution is approved by the City Council. Employees shall become fifty percent (50%) vested in such plan upon completion of the initial six months of employment. Thereafter, such vested interest shall increase at the rate of 5% for every Plan Year in which the employee completes 1000 hours of service. Once the employee has completed five (5) years of service, he/she shall become 100% vested in the retirement plan.

      2. The City will deduct an amount equal to 6.552%of each employee's base salary to invest in the City of Irvine DCPP. It is understood that this payroll deduction shall be mandatory for all employees who elect to remain in the City of Irvine DCPP.

3. All employees who elected to remain in the City of Irvine DCPP shall not be entitled to any CalPERS benefits, past, present or future, as provided under Section 2.1.B of this Resolution. If employees elected to remain in the City of Irvine DCPP, such participation shall continue until the employee terminates their employment from the City for any reason.

4. The City will utilize retirement plan forfeitures to offset the cost of City of Irvine DCPP account management and administrative fees.

B. The provisions of this section B.1 shall apply to employees, as of June 30, 2003, who elected to waive their rights to the City of Irvine Defined Contribution Pension Plan (DCPP) and who elected to transfer to the CalPERS program.

1. The City's contract with CalPERS shall include the following options:

   a. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)

   b. One Year Final Compensation (Cal. Govt. Code Section 20042)

   c. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost

   d. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)

   e. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)

   f. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)

2. All eligible employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program.

3. All active eligible employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the City of Irvine DCPP referenced in Section 2.1.A above.

4. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

5. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

6. Employer-Paid Member Contributions and New CalPERS Miscellaneous Tiers

   a. The full eight percent (8%) cost of the CalPERS member contributions will be paid by the employee.

   b. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for all miscellaneous employees hired on or after that date. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.

   c. All "new members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the City's Tier 3 plan; 2% at 62 formula for Miscellaneous employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

C. The Sworn employees listed in Attachment I shall become a member of the CalPERS retirement plan for local safety employees, pursuant to the contract between the City and CalPERS.

   1. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

   2. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).

      For employees who are members of the City's 3% at 50 CalPERS, the full nine percent (9%) member contribution will be paid by the member, through pre-tax payroll deduction.

   3. All "new members" within the meaning of the California Public Employees Pension Reform Act of 2013 hired by the City on or after January 1, 2013, will be placed in the City's Tier 3 plan; 2.7% at 57 for Sworn employees. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

   4. Employer paid member contributions shall be considered deferred income for federal and state income tax purposes. Should any state or federal agency alter the current income tax treatment of such payments, the consequences of such action shall be the sole responsibility of the affected employees, and shall in no way alter any obligation of the City toward such employees.

2. Retiree Health Plan

   A. The City shall contribute an amount equal to two percent (2%) of each employee's base salary in a Retiree Health Savings (RHS) account, which shall be administered by the employees covered by this Resolution.

   B. An employee who has retired from the City and has either attained the age of sixty (60) years or is fifty (50) years old and has completed five (5) years of service with the City shall be entitled to purchase the medical insurance plan in effect at the time of retirement at the City's rates for the employee and the employee's dependents at the cost to the former employee, now retiree.

   C. The City will allow a spouse of an eligible retired unit member to continue to purchase the medical insurance after the death of the retired employee, provided that the spouse was covered under a City insurance plan at the time of employee's death and provided that there has been no break in coverage since the employee's retirement. This eligibility for continued coverage ceases if such spouse remarries.

   D. Each representation unit has determined the type of retiree health program in which its members shall participate. In order to ensure that the employees can maximize their benefits, the City agrees to allow employees to remain in the designated type of retiree health program throughout their service with the City, whether or not the employee moves to another representation unit(s). In the event an employee moves to another representation unit, the City will contribute an amount up to the contribution established for the new unit's retiree health plan and the employee will not be eligible to participate in any other non-voluntary health plan offered to City employees. If the City's contribution toward a retiree health plan in the new unit is less than what is required for the employee's designated retiree health plan, the difference will be deducted from the employee's pay.

3. Health Insurance Benefits

   A. Indemnity Medical Insurance

      The City shall provide the option to employees to enroll in a medical indemnity insurance plan.

   B. Indemnity Dental Insurance

      The City shall provide the option to employees to enroll in a dental indemnity insurance plan.

   C. Health Maintenance Organizations

The City shall provide the option to employees to enroll in a health maintenance organization and/or a dental maintenance organization.

D. Vision Care Plan

The City shall provide a vision care plan.

E. For employees who choose the PPO medical plan, the total cost to the City for medical, dental, psychological and vision insurance shall not exceed $694.04 per month, per employee, $754.04 per month, per employee plus one (1) dependent or $1,064.31 per month per employee plus family. The medical tier that the employee selects will drive the insurance cap that is applied to the employee's health benefit selections.

F. Employees have the option of enrolling themselves and/or their dependents into a no-cost medical plan rather than being subject to the cap as set forth in item F., above. Under the no-cost plan, the City will provide any HMO Medical Plan and any HMO Dental Plan offered by the City, as described in item F. above. Under this option, employees may choose to upgrade from the HMO Dental Plan to the PPO Dental Plan, however the employee will be required to pay the difference in premium between the HMO Dental Plan and the PPO Dental Plan.

Effective January 1, 2015, any increase in the cost of the HMO Medical Plans over the costs in effect December 31, 2014, will be borne as follows: The City will pay 95% of the increased cost, and employees enrolled in HMO Medical Plans will pay the remaining 5% of cost increases in annual premiums. Each year thereafter, the amount paid by employees in prior years will be added to that portion of the increase (five percent 5%) the employees will pay in the current year.

4. Disability Insurance

The City shall provide a long-term disability insurance plan for employees.

5. Life Insurance

Employees covered by this Resolution shall be provided a life insurance policy in the amount equal to a full year's base salary rounded up to the next $1,000.

6. Flexible Spending Account

Employees may use pre-tax dollars to pay for eligible medical and dependent care expenses per Internal Revenue Code Sections 125 and 129. The City will use what legal means exist to recover cost for claims paid in advance of sufficient employee payroll deduction being made upon the employee's separation from the City.

7. Expense Allowances

A. Vehicle/Vehicle Allowance

Management employees listed in Sections A and B of Attachment I shall be provided a vehicle at City expense or a monthly vehicle allowance. Those classifications listed in Section C of Attachment I shall be provided a monthly vehicle allowance. The City Manager may approve use of a City vehicle or mileage reimbursement for those miles traveled in the employee's vehicle, which exceed the miles covered by the vehicle allowance based on the current mileage rate

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Classifications in Section A and B	$550
Classifications in Section C	$300

B. Telecommunications Allowance

Employees listed in Sections A, B and C of Attachment I shall be provided a $100.00 monthly allowance for cellular service. In addition, a reimbursement of up to $200 for cellular equipment will be provided upon receipt of invoice initially (following appointment to an affected classification) and once every two years thereafter, if necessary to replace existing equipment. All contracts for cellular service for these employees shall be between the provider and the individual.

8. Vacation

Management and Non-Represented employees shall accrue vacation credits on a monthly basis as follows:

Years of Service	Annual Vacation Credits
1 through 3	120 hours
After 3 through 10	160 hours
After 10 years or more	200 hours

As an incentive for filling critical management and non-represented positions, as part of an offer of employment, the City Manager may grant a vacation balance of one week upon appointment.

Employees may not accrue more than three (3) times their annual accrual rate of vacation. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The dates an employee may take her/his vacation shall be determined by the Department Director or the City Manager with due regard for the wishes of the employee and particular regard for the needs of the City. Other policies related to

the accrual and use of vacation shall be as provided in the Personnel Rules and Procedures.

9. Vacation Buyback

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to eighty (80) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

10. Personal Sick Leave

Employees shall accrue personal sick leave credits at the rate of eight (8) hours per month.

Unless unforeseen and extenuating circumstances arise, in order to receive compensation while absent on sick leave, the employee shall notify her/his immediate supervisor or the Personnel Officer prior to or within one (1) hour after the time set for beginning her/his daily duties, or as may be specified by the head of her/his department. When absence is for one workday or more, the employee may be required to file a physician's certificate with the Personnel Officer, stating the cause of absence.

An employee receiving temporary disability payments under the Workers' Compensation laws may use a pro-rated amount of accumulated sick leave in order to continue to maintain her/his regular income. Under such circumstances, the employee shall submit any benefit payments from the Workers' Compensation fund to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

11. Personal Sick Leave Conversion

Employees having less than ten (10) years of consecutive full-time service shall be eligible, if they so desire, each quarter (January 1, April 1, July 1, October 1) to convert unused personal sick leave in excess of 168 hours at a ratio of eight (8) hours of vacation for every twenty-four (24) hours of personal sick leave. Employees with at least ten (10) years of full-time consecutive service shall be eligible to convert sick leave in excess of 168 hours at the ratio of eight (8) vacation hours for sixteen (16) sick leave hours. One hundred sixty-eight (168) hours must be accrued and retained prior to converting any excess personal sick leave hours to vacation hours.

Effective the pay period following April 1 of each year, regular full-time employees, whose unused personal sick leave has accumulated to more than 700 hours, must convert those hours in excess of 700 into their respective individual accounts in the Management Retiree Health Savings Plan, subject to a maximum conversion of 120 hours of sick leave per employee per year. The conversion of personal sick leave into the Retiree Health Savings Plan shall occur as follows:

A. The City will convert unused sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

B. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Upon separation regular full-time employees must convert all remaining sick leave hours into their respective individual accounts in the Retiree Health Savings Plan as follows:

1. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees having less than ten (10) years of consecutive full-time service at a ratio of three (3) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

2. The City will convert unused personal sick leave into the Retiree Health Savings Plan for regular full-time employees with at least ten (10) years of consecutive full-time service at a ratio of two (2) hours of sick leave to one (1) hour of pay at the employee's current base salary rate.

Employees who separate due to termination for cause or resignation/retirement in lieu of termination for cause shall not be eligible to convert their sick leave into the Retiree Health Savings Plan.

12. Personal Leave

Effective the pay period which includes January 1st of each year, employees shall receive a Personal Leave Benefit of seventy-one (71) hours per year. Such leave shall be available for employees to use from the beginning of the first pay period beginning in the calendar year through the end of the last pay period beginning in the calendar year. Such hours shall not accrue from year to year. This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 71 hours. Probationary employees who commence employment with the City after January 1 will receive twenty four (24) less Personal Leave hours for every four (4) months the employee is not on paid status with the City.

The employee shall notify his/her immediate supervisor of the use of a Personal Leave day at least 36 hours in advance unless circumstances beyond the employee's control prevent such notification.

13. Bereavement Leave

Employees shall receive up to forty (40) hours for any one instance for absence necessitated by the death of immediate family members. Such credit shall not be accrued from year to year. The immediate family shall be defined as mean father, father-in-law, mother, mother-in-law, step-parent, brother, step-brother, sister, step-sister, wife, husband, registered domestic partner, child, step-child**,** grandparent, grandparents in-law, grandchild, legal guardian or other individuals whose relationship to the employee is that of a dependent, a domestic partner as defined by California Family Code section 297, or a person who stood *in loco parentis* (in place of a parent) to the employee.

14. Parenthood Leave

An employee may be granted a temporary parenthood leave of absence without pay, not to exceed 180 calendar days per year, upon approval from the City Manager. The employee requesting such leave shall present evidence of the birth or adoption of a child by the employee or spouse to his/her Department Director. The City will comply with all elements of parenthood leave under the Family Medical Leave Act and the California Family Rights Act. . Any such leave will run concurrently with parenthood leave as provided for under the FMLA and CFRA.

15. Administrative Leave

Effective the first pay period beginning in January of each year, employees in classifications listed in Section A, B, C or D of Attachment I will receive forty (40) hours of Administrative Leave per calendar year. Administrative Leave will be prorated on a monthly basis for management and non-represented employees appointed during the calendar year. Additional Administrative Leave may be approved by the Department Director or City Manager. Administrative Leave must be used by the end of the calendar year. Such hours shall not accrue from year to year or be paid off upon termination. . This leave has no cash value and cannot be cashed out. If, at the end of the calendar year, the employee has any of this leave on the books, with the pay period including January 1, he/she will be provided with whatever amount of leave is necessary to bring his/her bank up to 40 hours.

16. Education/ Reimbursement/Professional Development/Professional Advancement

Employees shall be eligible for reimbursement of approved education or professional development expenses to a maximum of $1,300 per calendar year.

Up to $500 of the employee's annual professional development fund may be used towards travel, expenses for City approved conferences, seminars, job-related training, and/or certified wellness programs for Sworn employees in accordance with Irvine Police Department and City Policy. Employees using professional development funds for travel-related purposes shall be subject to all guidelines established by City travel policies and procedures.

Up to $250 of the employee's annual professional development funds may be used toward supplementing un-reimbursed expenses for his/her annual physical examination, subject to the provisions of Article 24 of the City's Personnel Rules and Procedures.

The sworn employees listed in Attachment I shall be eligible for a twelve percent (12%) Professional Advancement benefit upon attaining a California P.O.S.T. Executive Development Certificate or completion of a FBI National Academy program or completion of a Master's Degree or comparable extended professional management training program.

17. Holidays

The recognized holidays to be observed by the City in each calendar year shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Full-time employees shall receive nine (9) hours pay for each holiday observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive eight (8) hours pay for each holiday observed on a regularly scheduled working Friday. Regular full-time employees working an eight-hour (8), five-day (5) schedule will receive eight (8) hours for each of these holidays.

Holiday Leave

Effective in December 2017 and each year thereafter, employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. In cases where a designated "Holiday Leave" day falls on an employee's regularly scheduled day off, the employee will be credited with leave in an amount equivalent to what they would have used had it been a regularly scheduled work day. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

18. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that employees are able to support our system of justice by serving on

juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

19. Military Leave

Employees shall be entitled to such benefits as are provided by law. An employee requesting such military leave shall present a copy of her/his military orders to her/his Department Director or the City Manager prior to the beginning of the leave.

20. Physical Examination

The City shall reimburse employees in classifications listed in Sections A, B or C of Attachment I up to a maximum of $350 per calendar year for expenses incurred as a result of an annual physical examination as defined in Article 24 of the City's Personnel Rules and Procedures. The City shall reimburse employees in classifications listed in Section D of Attachment I up to a maximum of $250 per calendar year for expenses incurred as a result of an annual physical examination as defined in Article 24 of the City's Personnel Rules and Procedures. An annual physical is optional. Expenses eligible for payment by the City health insurance plan shall not be eligible for reimbursement.

21. Industrial Accident Salary Continuance

In the event that it is determined that a full-time employee is absent from work as a result of any injury or disease arising solely out of the employment with the City and in no way related to any prior existing condition, the City shall provide up to six (6) months of Industrial Accident Salary Continuance during any two-year period under the following conditions:

A. In the event the employee qualifies for compensation under State law, the employee shall receive the difference between the Workers' Compensation payments and his/her regular salary;

B. The employee shall accrue sick leave or vacation leave during the term of the Industrial Accident Salary Continuance taken;

C. The employee's condition is not permanent and stationary as determined by the City's appointed physician.

For sworn CalPERS members, the City shall follow the provisions of Section 4850 of the California Labor Code when that member is disabled by injury or illness arising out of and in the course of his/her duties.

In the event of an on-the-job injury or accident resulting in loss of time beyond that required for immediate medical attention, such employee may be required to be examined by a licensed physician appointed by the City of Irvine.

Any on-the-job injury or accident must be reported to the employee's immediate supervisor within twenty-four (24) hours after said injury or accident. Failure to report said injury or said accident shall be grounds for disciplinary action.

22. Accrual of Leaves

All paid leave hours accrued shall be prorated based on the number of hours worked or paid up to eighty (80) hours in a pay period.

23. Select Benefits Program

The City will provide a cafeteria-style benefit program for Management and Non-Represented employees to include the following general elements:

A. Enhanced choices among City-offered health benefit plans.

B. Employees not claiming dependents on their health plan shall receive $150 per month. The stipend may be taken as taxable cash.

24. Management Incentive Pay

Management employees in the classifications listed in Sections A, B, and C of Attachment I, shall be eligible to receive 3% Management Incentive Pay above the base salary, in recognition for the unique nature of their work.

25. Bilingual Pay Program

Department Directors shall annually designate which positions will be assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified

employees who meet the following criteria shall receive an additional $50.00 per month.

A. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

B. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

C. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the order of rotation among the qualified employees. An employee who has not performed bilingual duties within the rotation for a period of 24 months or longer must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

SECTION 3. PAY PROGRESSION IN A PAY GRADE

1. Base Pay Progression

Pay progression within a Salary Grade will be based strictly upon individual performance and summarized in an annual performance appraisal. For employees listed in Sections B, C, and D of Attachment I, all base pay progression within pay grades will be limited to the Market Point of a pay grade according to the following schedule:

Salary Placement in Pay Grade	Performance Level	Pay Increase
Less than Maximum Range	Unsatisfactory or Needs Development	0%
Less than Maximum Range	Accomplished Standards	3% base adjustment, limited to Maximum of pay grade

Less than Maximum Range	Excellent	4 ½% base adjustment, limited to Maximum of pay grade
Less than Maximum Range	Outstanding	6% base adjustment, up Maximum of pay grade

Annual merit increases will be effective the payroll period that includes September 1st of each year and will be prospective from that date.

2. Initial Six-Month Merit Reviews

Employees listed in Sections B, C and D of Attachment I who have completed less than six (6) months of service in their Management or Non-Represented classification effective June 30th of each year will not be eligible to participate in the annual review process. At the completion of the initial six months of service in their current classification, the employees in Sections B, C and D of Attachment I will receive a performance review and merit increase appropriate to the performance review rating. The criteria and rating system for six-month reviews will be the same as those for annual performance reviews.

Following the completion of six months of service in their current classifications, the employees in Sections B, C and D of Attachment I will be eligible to participate in the annual performance review process the following July. The merit increase granted in the first annual review process following the initial six (6) month merit review will be prorated to reflect only the time period since the completion of the initial six months of service. All subsequent performance reviews will be according to the same merit schedule as other Management and Non-Represented employees.

SECTION 4. WAGE AND SALARY ADJUSTMENT

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

SECTION 5. MANAGEMENT SPECIALIST

Classifications listed in Section D of Attachment I shall be designated as “Management Specialists” pursuant to the City’s Personnel Rules and Procedures.

SECTION 6. SEVERANCE

In the event of a lay-off within a designated management classification, the City Manager shall be authorized to enter into a severance agreement with the impacted employee.

SECTION 7. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 8.

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on the twelfth day of September 2017, unless otherwise stated. All previous resolutions are hereby repealed effective on the operative date of this resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

Attachment I

Executive Management, Management and
Non-Represented Employees (Exempt) Classification Titles

A. City Manager

B. Assistant City Manager
Assistant City Manager, Special Projects
City Clerk
Director of Administrative Services
Director of Community Development
Director of Community Services
Director of the Great Park
Director of Public Affairs and Communications
Director of Public Safety/Chief of Police
Director of Public Works
Director of Transportation
Deputy City Manager
Deputy Director, Administrative Services
Deputy Director, Community Services
Deputy Director, Public Works
Deputy Director, Public Safety/Police Chief
Deputy Director, Community Development
Special Assistant to the Chief of Police

C. Chief Information Officer
Council Services Manager
Manager, Advance Planning
Manager, Animal Care
Manager, Budget & Business Planning
Manager, Building & Safety/Chief Building Official
Manager, Business Services
Manager, Community Services
Manager, Engineering/City Engineer
Manager, Facility Maintenance and Rehabilitation
Manager, Fiscal Services
Manager, Great Park Planning & Development
Manager, Housing
Manager, Human Resources
Manager, Land & Assets
Manager, Neighborhood Services
Manager, Orange County Great Park Corporation
Manager, Public Communications
Manager, Public Services
Manager, Transit and Transportation

D. Chief Veterinarian
Animal Care Center Veterinarian

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING A CLASSIFICATION AND COMPENSATION POLICY FOR PART-TIME EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 15-81 EFFECTIVE THE PAY PERIOD THAT INCLUDES AUGUST 11, 2017

WHEREAS, the City of Irvine has established a classification and compensation policy for part-time employees.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. CLASSIFICATION AND PAY STRUCTURE

Part-time classification titles shall be set forth in Attachment I effective August 13, 2015. The minimum and maximum hourly rates for part-time classifications shall be as set forth in the Annual Salary Resolution for all City Employees. Part-time positions with full-time classification titles shall have minimum hourly rates which are the hourly equivalent to the minimum of the salary range for the corresponding full-time classification; the maximum hourly rate for part-time positions with full-time classification titles included in the ICEA unit shall be the hourly equivalent to thirty-eight percent (38%) above the range minimum of the salary range for the corresponding full-time classification; the maximum hourly rate for all other part-time positions with full-time classification titles shall be the hourly equivalent to thirty-seven and a half percent (37.5%) above the range minimum of the salary range for the corresponding full-time classification.

Wage and Salary Range Adjustment

Effective the pay period that includes September 1, 2017, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

Effective the pay period that includes July 1, 2018, the salary ranges of the classifications covered by this Resolution shall be increased by two percent (2.0%).

SECTION 2. PERFORMANCE REVIEW SYSTEM FOR PART-TIME EMPLOYEES

Part-time employees, except for Council Executive Assistants and Crossing Guards, will receive performance reviews and merit adjustments at six (6) months and annually thereafter. Recommended merit adjustments must be based upon written performance evaluations. The following performance rating categories will be used.

For fiscal year 2013-14, merit increases will be effective the pay period that includes September 1, 2013.

Pay Rate in Pay Grade	Performance Rating	Pay Increase
Less than Maximum	Needs Improvement	0%
Less than Maximum	Successful	5% base adjustment, limited to maximum of pay grade
Less than Maximum	Excellent	5% base adjustment, limited to maximum of pay grade
Less than Maximum	Outstanding	5% base adjustment, limited to maximum

SECTION 3. RETIREMENT PLAN

In accordance with the Social Security Act, 26 U.S.C. § 3121(b)(7)(f), part-time employees will be eligible to participate in a qualified retirement plan of the City's choice.

1. 2003 Implementation of CalPERS Option in the City of Irvine (Applicable to part-time employees hired prior to June 30, 2003)

A. PARS I: All part-time employees designated as Regular Part-time and Extended Part-time who work 1,000 hours or more per fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis, and who elected to decline the CalPERS benefits shall be enrolled in the PARS I plan.

1. The PARS I retirement plan shall be provided through participation in the Public Agency Retirement Systems Trust. The plan is in compliance with the Omnibus Reconciliation Act of 1990.
2. Once a member of the PARS I plan, such participation shall continue until the employee terminates employment with the City for any reason.

3. Contribution Rates:
   i. The following employee and employer contribution formulas shall be in effect for the PARS I plan:
   Employee Contribution: 4.3%
   Employer Contribution: 3.2%

B. CalPERS: For all part-time employees designated as Regular Part-time and Extended Part-time who work 1,000 hours or more per fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis, who

elected to waive their rights to the Public Agency Retirement Systems Trust (PARS I) and who elected to transfer to the CalPERS program:

1. The City's contract with CalPERS shall include the following options:
   i. 2.7% @ 55 Full Formula for Local Miscellaneous Members (Cal. Govt. Code Section 21354.5)
   ii. One Year Final Compensation (Cal. Govt. Code Section 20042)
   iii. Military Service Credit as Public Service (Govt. Code Section 21024), in which the employee pays the entire cost
   iv. Improved Non-Industrial Disability Allowance (Cal. Govt. Code Section 21427)
   v. 4th Level 1959 Survivor Benefits (Govt. Code Section 21574)
   vi. Limit Prior Service to Members Employed on Contract Date (Govt. Code Section 20938)
   vii. The CalPERS vesting schedule will apply (Cal. Govt. Code Section 21060).
   viii. All eligible part-time employees shall be members of CalPERS, unless they elected to decline the CalPERS benefits through the irrevocable election process. All employees covered by CalPERS shall no longer be entitled to any benefits past, present or future, provided under the PARS I plan referenced in Section 3.1.A.
   ix. Once a member of the CalPERS plan, such participation shall continue until the employee terminates employment with the City for any reason.

C. PARS II: All part-time employees who were not eligible to enroll in the CalPERS or PARS I plan were enrolled into the City's PARS II Plan.

2. Ongoing Retirement Plan Eligibility (Applicable to part-time employees hired July 1, 2003 and after)

A. PARS II: Part-time employees hired on or after July 1, 2003 who do not qualify for CalPERS membership (are not members of CalPERS from previous employment and or do not work 1,000 hours or more in a fiscal year or an average of 20 hours per week on a regular fiscal year-round basis) shall be enrolled by the City in the Public Agency Retirement Services (PARS II) plan.
   1. Participation in the PARS II plan shall continue until the employee terminates employment or becomes a CalPERS eligible part-time employee for any reason.
   2. Contribution Rates:
      i. The following employee and employer contribution formulas shall be in effect for the PARS II plan:
         Employee Contribution: 4.3%
         Employer Contribution: 3.2%

B. CalPERS:

1. Eligible Employees: All eligible part-time employees hired on or after July 5, 2003, the effective date of the CalPERS contract, shall become members of the CalPERS Retirement Program. Eligible employees include:
   i. Employees appointed to an Extended Part-time position.
   ii. Part-time employees who work 1,000 hours or more in a fiscal year, or an average of 20 hours per week on a regular fiscal year-round basis.
   iii. Part-time employees who are members of CalPERS based on previous employment.
   iv. CalPERS member employees who separate from the City of Irvine and then return to work in the City in a PERS eligible position will be enrolled in their original PERS tier.

2. Contribution Rates:
   i. The full eight percent (8%) cost of the CalPERS member contribution will be paid by the employee.
   ii. Effective April 14, 2012, the City implemented the 2% @ 55 retirement program with the average of the three highest paid consecutive years for new hires. Employees in the 2% @ 55 plan will pay the full 7% Member Contribution for the entire term of their employment.
   iii. Effective January 1, 2013 all "new members" within the meaning of the California Public Employees' Pension Reform Act of 2013 hired by the City will become members of the City's Tier 3 plan; 2% at 62 retirement program with highest average annual pensionable compensation earned during a period of at least 36 consecutive months.
   iv. Employees will pay the full employee contribution, which will be one-half the normal rate as determined by CalPERS and there shall be no employer payment of any of the required employee contribution.

C. Retired Annuitants: Retired annuitants are CalPERS retirees who work part–time and are limited to working 960 or fewer hours in a fiscal year. As retired members of CalPERS, these employees are considered to be participants of a qualified retirement plan and therefore will not be enrolled by the City in any additional retirement plan limited to the guidelines set forth by CalPERS.

SECTION 4. DESIGNATION OF PART-TIME EMPLOYEES

All references to regular part-time employees in this Resolution shall be defined as regular part-time employees who were hired before May 8, 1997 and who retained the designation of a regular employee within the competitive service. All other part-time

employees shall be “at-will” and serve at the pleasure of the appointing authority. Part-time employees appointed to assignments which require a minimum of thirty (30) hours of work per week on a permanent year-round basis shall be called “extended” part-time employees for the purposes of this Resolution.

Regular part-time employees and extended part-time employees will be eligible to receive compensation benefits as identified in SECTION 5 of this Resolution. All part-time employees shall be eligible to receive additional compensation benefits as identified in SECTION 6 of this Resolution.

Council Executive Assistants shall be classified as part-time employees and subject to the provisions of the Resolution of the City Council of the City of Irvine Establishing Administrative Policies and Procedures for Council Executive Assistants. Council Executive Assistants that consistently work an average of 30 hours shall be eligible to receive benefits consistent with EPT benefits.

Crossing Guards are compensated on a daily stipend basis and are not eligible for vacation or holiday benefits. Crossing Guards are paid only for days worked and earn the full daily stipend amount for completing a full daily work shift or half the daily stipend for completing only half of the daily work shift. Crossing Guards hired prior to 1996 shall be paid at the Tier II stipend rate. All other Crossing Guards shall be paid at the Tier I stipend rate. Crossing Guards are eligible to participate in the PARS retirement plan in accordance to Section 3 of this Resolution, in the Medical Insurance program in accordance with Section 5.1. of this Resolution and receive paid sick leave benefits in accordance to Section 5.4 of this Resolution.

SECTION 5. COMPENSATION COMPONENTS FOR REGULAR AND EXTENDED PART-TIME PERSONNEL

Regular part-time employees and extended part-time employees shall receive additional compensation benefits as follows:

1. Medical Insurance:

   A. Health Insurance:

   The City shall provide the option to employees to enroll in an indemnity medical insurance plan or Health Maintenance Organization (HMO).

   B. The total cost to the City for medical insurance coverage for employee only shall not exceed 50% of the monthly premium.

   C. The City shall provide the option to employees, who have enrolled in the HMO plan, to purchase HMO medical insurance for their dependents. The total cost of the additional premium shall be borne by the employee.

D. The City shall provide the option to employees to enroll in a dental Health Maintenance Organization for employees only. The total cost shall be borne by the employee.

2. Vacation:

Regular part-time employees and all other extended part-time employees shall accrue vacation benefits on an annual basis as follows:

Years of Service	Annual Vacation Credits
1 through 3	60 hours
after 3 through 10	90 hours
after 10 years or more	120 hours

Employees may not accrue more than forty (40) hours of additional vacation beyond the annual rate at which they are eligible to earn vacation credits. When an employee earns vacation in excess of the maximum accrual, the employee shall be paid for vacation during the pay period earned and at the employee's base rate of pay.

The time during a calendar year at which an employee may take her/his vacation shall be determined by the Department Director with due regard for the wishes of the employee and particular regard for the needs of the City.

In the event one or more municipal holidays fall within an annual vacation leave, such holidays, if normally scheduled to work, shall not be charged as vacation leave, but rather as holidays.

Regular part-time employees and extended part-time employees who terminate employment shall be paid in a lump sum for all accrued, but not used, vacation leave earned prior to the effective date of termination.

3. Vacation Buyback:

On or before the pay period which includes December 15 of each calendar year**,** an employee may make an irrevocable election to cash out up to twenty (20) hours of accrued vacation (in whole hour increments) which will be earned in the following calendar year at the employee's base rate of pay. The employee will receive cash for the amount of vacation the employee irrevocably elected to cash out in the prior year. Payment will be made by Thanksgiving. However, if the employee's vacation leave balance is less than the amount the employee elected to cash out (in the prior calendar year) the employee will receive cash for the amount of leave the employee has accrued at the time of the cash out.

4. Paid Sick Leave:

a. Regular part-time employees and all other extended part-time employees shall accrue paid sick leave credits at the rate of six (6) hours per month (2.77 hours per pay period).
b. Part-Time employees and crossing guards who qualify for paid sick leave under AB 1522 shall receive paid sick leave annually in the pay period that includes July 1. Retired annuitants are not eligible to receive paid sick leave benefits under AB 1522. Eligible employees may begin using paid sick leave after 90 days of employment with the City.

    i. Eligible part-time employees shall receive 24 hours of paid sick leave annually. Part-Time employees hired after July 1, will receive a prorated amount of two hours per month. A part-time employee who uses paid sick leave must use a minimum of two hours.
    ii. Crossing guards shall receive the equivalent of three (3) shifts of paid sick leave annually. Crossing guards who are hired after July 1, will receive a prorated amount of one shift for every four months. A crossing guard who uses paid sick leave must use a minimum of one half a stipend.
    iii. Paid sick leave will not be considered hours worked for purposes of overtime calculation. Employees will not receive compensation for unused accrued paid sick leave upon termination, resignation, retirement or other separation from employment from the City.
    iv. If an employee separates from the City and is rehired within one year of the date of separation, previously accrued and unused paid sick leave hours shall be reinstated to the extent required by law. However, if a rehired employee had not met the requisite 90 days of employment to use paid sick leave at the time of separation, the employee must still satisfy the 90 days of employment requirement prior to using paid sick leave.

c. In accordance with California's Paid Sick Leave law, an employee may use accrued paid sick leave for one of the following reasons:

    i. For the employee's own diagnosis, care, or treatment of an existing health condition or preventative care.
    ii. For the diagnosis, care, or treatment of an existing health condition or preventative care for an employee's family member, including: Child (including a biological, adopted, or foster child, stepchild, legal ward, or a child to whom the employee stands in loco parentis.), spouse or Registered Domestic Partner, parent (including biological, adoptive, or foster parent, stepparent, or legal guardian of an employee or the employee's spouse or registered domestic partner, or a person who stood in loco parentis when the employee was a minor child.), grandparent, grandchild or sibling.
    iii. To obtain any relief or services related to being a victim of domestic violence, sexual assault, or stalking including the following with appropriate certification of the need for such services: A temporary restraining order or restraining order, other injunctive relief to help ensure the health, safety or welfare of themselves or their children, to seek medical attention for injuries caused by domestic violence, sexual assault, or stalking, to obtain

services from a domestic violence shelter, program, or rape crisis center as a result of domestic violence, sexual assault, or stalking, to obtain psychological counseling related to an experience of domestic violence, sexual assault, or stalking, to participate in safety planning and take other actions to increase safety from future domestic violence, sexual assault, or stalking, including temporary or permanent relocation.

An employee shall provide reasonable advance notification of their need to use accrued paid sick leave to their supervisor if the need for paid sick leave use is foreseeable (*e.g.,* doctor's appointment scheduled in advance). If the need for paid sick leave use is unforeseeable, the employee shall provide notice of the need for the leave to his/her supervisor with one (1) hour after the time set for beginning his/her daily duties, or as may be specified by the head of his/her department.

An employee receiving temporary disability payments while in the Workers' Compensation Program may use a pro-rated amount of accumulated leaves to supplement temporary disability payments in order to continue to maintain her/his regular income. Employees must use their accrued sick leave (until this sick leave is exhausted) prior to use of other leaves. Under circumstances in which an employee receives benefits over and above his/her regular income, the employees shall submit the excess amount to the Finance Officer.

An employee may be required to provide a doctor's release to return to work following an illness or injury resulting in an inability to perform assigned duties.

5. Holidays:

The holidays to be observed by the City shall be as follows:

New Year's Day
Martin Luther King Jr. Day
Washington's Birthday
Memorial Day
Independence Day (4th of July)
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

Prior to the beginning of the calendar year, Administrative Services will designate and announce the dates on which the above referenced holidays shall be observed. Human Resources may designate alternate dates the City will observe holidays in order to occur in conjunction with the Holiday Leave benefit provided below.

Employees, who are assigned to a 7-day work schedule, as designated by their department, shall observe holidays on the same days as employees who are not assigned to a 7-day work schedule with the following exceptions;

New Year's Day
Independence Day (4th of July)
Christmas Eve
Christmas Day

In this case, employees shall observe the holiday on the actual day of the holiday.

Regular part-time employees and extended part-time employees shall receive up to nine (9) hours of pay for normally scheduled working hours which fall on official City holidays observed on a Monday, Tuesday, Wednesday, or Thursday. Employees shall receive up to eight (8) hours of pay for normally scheduled working hours which fall on official City holidays observed on a Friday. An employee must be paid for all of the regularly scheduled workday immediately prior to a holiday and the regularly scheduled workday immediately after that holiday in order to receive holiday pay.

Holidays falling on Sunday shall be observed on the following Monday. Holidays falling on Saturday shall be observed on the preceding Friday unless this, too, is a holiday and then one day sooner.

Regular part-time employees and extended part-time employees assigned to work on authorized holidays shall receive regular paid holiday compensation and compensation for actual hours worked.

Holiday Leave

Effective in December 2017 and each year thereafter, extended part-time employees in the unit will not be required to come to work and will be provided with three days of paid leave to be used in the pay period that includes the Christmas Eve, Christmas Day and New Year's Holidays. The dates of the three "Holiday Leave" days will be designated annually by Human Resources. Employees will be provided with three days of paid leave based on the number of hours they are regularly scheduled to work on designated "Holiday Leave" days. Employees must use this leave on the designated days unless directed to work by the Department Director or designee. In cases where the employee is directed to work on such days, the employee will be credited with leave in an amount equivalent to what they would have used had they not been directed to work. Such leave shall have no cash value, and will expire if not utilized within the pay period that includes November 30 of the following year.

Extended part-time employees wanting to take additional days off in conjunction with the observed Holidays and designated Holiday Leave Days must utilize other accrued leave in accordance with existing rules.

For 2017, the following shall be observed:

Monday 12/25 - Christmas Day Eve
Tuesday 12/26- Christmas Day
Wednesday 12/27- Holiday Leave
Thursday 12/28- Holiday Leave
Friday 12/29- Holiday Leave

For 2018, the following shall be observed:

Monday 12/24-Christmas Eve
Tuesday 12/25-Christmas Day
Wednesday 12/26- Holiday Leave
Thursday 12/27- Holiday Leave
Friday 12/28- Holiday Leave

6. Jury Duty and Subpoenas

Every employee of the City who is subpoenaed as a witness for a local, state or federal government shall be entitled to absent herself/himself from her/his duties with the City during the period of such service or while necessarily being present in court as a result of such call or subpoena, and shall receive full compensation.

In order to balance the City of Irvine's interest in maintaining productivity with the interest that regular part-time and extended part-time employees of the City are able to support our system of justice by serving on juries, paid Jury Duty is limited to a maximum of 80 hours in a calendar year. If an employee, despite reporting the limit to the Court, is required to serve beyond 80 hours he or she can request an exception of the limit on paid Jury Duty Leave by the City Manager.

If an employee is required to be absent from work to report for jury duty, the employee will notify his/her supervisor of the absence as soon as possible, including, a phone message the night before if the employee finds out via a phone recording that he/she must report the next day.

An employee on jury duty must either return to work after the jury service is done for the day if there are still four hours left on his/her shift or call in to his/her supervisor and ask to use leave to cover the rest of his/her shift.

For any additional time taken off before or after jury duty, an employee will be required to utilize paid accrued time subject to supervisor approval.

An employee who is called to jury duty on a non-working day will not receive compensation or be authorized to change their schedule as a result of being called to jury duty.

SECTION 6. COMPENSATION COMPONENTS APPLICABLE TO ALL PART-TIME PERSONNEL

1. Overtime Compensation:

   Hours worked in excess of forty (40) hours in each employee's defined FLSA workweek shall be compensated at one and one-half time (1-1/2) the employee's hourly rate when authorized by the Department Director and approved by the City Manager. Part-time employees may not accrue any form of compensatory time-off.

2. Bilingual Pay:

   A. Department Directors shall annually designate which positions are assigned bilingual duties and which languages shall be eligible for bilingual pay. Qualified employees who meet the following criteria shall receive an additional $11.54 per pay period. For pay periods where the employee does not receive a paycheck, no bilingual pay will be paid.

   B. An employee must be assigned to speak or translate a language in addition to English as part of their position responsibilities. This includes such specialized communication skills as sign language.

   C. To become qualified, employees must be certified as qualified by the Personnel Officer or designee.

   D. Any employee who has been determined as qualified for bilingual pay and who is on any leave of absence for at least one calendar month, exclusive of accrued vacation or compensatory time, will be ineligible for bilingual pay until his/her return to work. Upon his/her return to work, the employee will be reinstated into the bilingual pay program and receive his/her $25.00 monthly stipend effective the first working day of the new calendar month following his/her return to work. The employee will not be required to perform bilingual interpretation services during any period in which he/she is not receiving the bilingual pay stipend.

   E. For positions requiring extensive contact with the public or contractors, bilingual pay will be rotated among employees who are deemed as qualified by the City. The Department Director will have the discretion to determine the number of employees and the sections/units that qualify to participate in a "rotation pool." Rotations will occur every 12 months, effective the first pay period each November. It is the Department Director's sole discretion to determine the

order of rotation among the qualified employees. An employee, who has not performed bilingual duties within the rotation for a period of 24 months or longer, must be re-certified by the City in order to receive bilingual pay.

An employee in a bilingual assignment may request to have the bilingual assignment and corresponding pay removed.

3. Class B Certification Stipend

A. Employees who are assigned to an eligible assignment and who possess a California Class B Driver's License shall receive an additional $16.15 per pay period. For pay periods where the employee does not receive a paycheck, no Class B Stipend will be paid.

B. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for the Class B Certification Stipend, depending on the frequency and regularity of duties that require a California Class B Driver License.

4. Compensation for Employees Assigned to Care for Animals at Home

Employees covered herein who are assigned to care for animals in their home are entitled to compensation for the off-duty hours spent caring, grooming and feeding their animal. The parties acknowledge that the Fair Labor Standards Act, which governs the entitlement to compensation for off duty caring, grooming and feeding of animals, entitles the parties to agree to a reasonable number of hours per week or per month for the performance of such duties. It is the intent of the parties through the provisions of this agreement to fully comply with the requirements of the Fair Labor Standards Act. In addition, both parties believe that this agreement does comply with the requirements of the Fair Labor Standards Act, including, but not limited to Department of Labor regulation 29 CFR section 785.23.

Employees assigned as animal caregivers at home shall be paid $7.25 per hour for such duties and are not permitted to work more than two (2) hours per week on such duties. The $7.25 is intended to comply with the federal minimum wage per the FLSA. If that wage increases, the compensation for such duties will increase to match the federal minimum wage. Since such hours are in addition an employees' regular work hours, if such employees exceed the overtime threshold for the week by the performance of the off-duty animal caregiver duties, employees will be paid at 1.5 times the $7.25 per hour rate, i.e., $10.875 (up to a maximum of two hours per week) for such duties for a total weekly amount of $21.75.

A. Only Community Services employees who are regularly assigned to the Irvine Animal Care Center are eligible for this compensation;
B. The Department Director, with the concurrence of the Personnel Officer, will determine which assignments are eligible for this compensation, depending on the frequency and regularity of these duties.

SECTION 7. ADMINISTRATION OF COMPENSATION POLICY

The Personnel Officer shall establish procedures for the efficient administration of the compensation policy described in this Resolution.

The City Manager shall approve procedures for movement of an individual employee through salary ranges. Such procedures shall be reviewed annually. All adjustments to the salary ranges shall be approved by the City Council.

SECTION 8. EMPLOYEE RESPONSIBILITIES

Since it is the City's policy to recruit highly qualified staff at a competitive total compensation level, the employees shall be responsible for striving to meet the high performance standards established by the City management.

SECTION 9. EFFECTIVE DATE

The compensation policy provided for by this Resolution shall be operative from and after 12:01 a.m. on September 12, 2017, unless otherwise stated. All previous Resolutions are hereby repealed effective on the operative date of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT I

PART-TIME CLASSIFICATION TITLES

Animal Care Attendant
Animal Care Specialist
Animal Services Officer
Assistant Food Service Manager
Catering Coordinator
Community Services Leader I
Community Services Leader II
Community Services Leader III
Community Services Senior Leader
Council Executive Assistant I
Council Executive Assistant II
Council Executive Assistant III
Council Executive Assistant IV
Crossing Guard
Department Aide
Equipment Service Worker
GIS Technician
Graphic Designer
Information Systems Specialist
Intern I
Intern II
Kitchen Assistant I
Kitchen Assistant II
Lead Cook
Lifeguard
Office Assistant I
Office Assistant II
Office Assistant III
Outreach Assistant I
Outreach Assistant II
Pool Manager
Public Information Assistant
Public Safety Aide
Registered Veterinary Technician Specialist
Reservations Specialist I
Reservations Specialist II
Reservations Specialist III
Senior Council Executive Assistant
Senior Graphics Designer
Swim Instructor/Lifeguard
Veterinary Assistant
Zoning Administrator

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING FULL-TIME POSITIONS IN ACCORDANCE WITH THE PROVISIONS OF COMPENSATION RESOLUTIONS AND THE OPERATING BUDGET FOR THE 2017-18 FISCAL YEAR, AND SUPERSEDING RESOLUTION NO. 17-45, WHICH IS INCONSISTENT THEREWITH

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

The City Council of the City of Irvine hereby amends the previously authorized Full-time Position Control Resolution in accordance with the provisions of September 12, 2017:

CLASSIFICATION	FY 2017-18
Accountant	2
Accounting Technician	4
Administrative Aide	4
Administrative Coordinator	6
Administrative Secretary	18
Animal Care Center Supervisor	1
Animal Care Volunteer Program Supervisor	1
Animal Services Officer	4
Animal Services Supervisor	1
Applications Programmer/Analyst	1
Aquatics Coordinator	2
Aquatics Supervisor	1
Armorer	1
Assistant City Clerk	1
Assistant City Engineer	2
Assistant City Manager	1
Assistant City Manager – Special Projects	1
Assistant Engineer	4
Assistant Planner	2
Associate Engineer	5
Associate Plan Check Engineer	2
Associate Planner	6
Associate Transportation Analyst	2
Budget Officer	1
Building Inspection Supervisor	4

CLASSIFICATION	FY 2017-18
Building Inspector	2
Business Services Administrator	2
Buyer	2
Capital Improvement Program Administrator	1
Chief Information Officer	1
Chief Veterinarian	1
City Clerk	1
City Manager	1
Civilian Investigator I	2
Civilian Investigator II	8
Code Enforcement Supervisor	1
Code Enforcement Technician	1
Communications Bureau Supervisor	1
Community Services Administrator	1
Community Services Program Coordinator	34
Community Services Specialist	21
Community Services Superintendent	8
Community Services Supervisor	16
Construction Inspection Supervisor	1
Construction Inspector	1
Council Services Manager	1
Crime Analyst	1
Deputy Building Official	1
Deputy City Clerk I	1
Deputy City Clerk II	1
Deputy City Manager	1
Deputy Director, Administrative Services	1
Deputy Director, Community Development	1
Deputy Director, Community Services	1
Deputy Director, Public Safety/Police Chief	1
Deputy Director, Public Works	1
Director of Administrative Services	1
Director of Community Development	1
Director of Community Services	1
Director of Orange County Great Park	1
Director of Public Affairs and Communications	1
Director of Public Safety/Chief of Police	1
Director of Public Works	1
Director of Transportation	1
Emergency Management Administrator	1
Engineering Technician	3

CLASSIFICATION	FY 2017-18
Environmental Programs Administrator	1
Equipment Operator I	5
Equipment Operator II	2
Executive Coordinator	1
Executive Secretary	3
Facilities Maintenance Specialist	4
Facilities Maintenance Superintendent	1
Facilities Maintenance Supervisor	2
Facilities Maintenance Technician	9
Facilities Reservations Coordinator	1
Finance Administrator	1
Finance Officer	1
Fleet Services Superintendent	1
Fleet Services Supervisor	1
FOR Families Specialist	1
Forensic Specialist I	1
Forensic Specialist II	4
Forensic Supervisor	1
GIS Analyst	1
GIS Supervisor	1
Great Park Project Administrator	1
Great Park Property Administrator	1
HRIS Specialist	1
Human Resources Administrator	1
Human Resources Analyst I	2
Human Resources Analyst II	1
Human Resources Specialist	2
Information Specialist	3
Landscape Contract Specialist	2
Landscape Maintenance Specialist	9
Landscape Maintenance Superintendent	1
Landscape Maintenance Supervisor	5
Landscape Maintenance Technician	2
Lead Accounting Technician	1
Lead Facilities Maintenance Technician	4
Lead Information Specialist	2
Lead Landscape Maintenance Technician	5
Lead Mail Coordinator	1
Lead Permit Specialist	1
Lead Street Maintenance Technician	7

CLASSIFICATION	FY 2017-18
License Specialist	3
Mail Coordinator	1
Management Analyst I	6
Management Analyst II	5
Manager, Advance Planning	1
Manager, Budget & Business Planning	1
Manager, Building & Safety/Chief Building Official	1
Manager, Community Services	4
Manager, Engineering/City Engineer	1
Manager, Facilities Maintenance & Rehabilitation	1
Manager, Fiscal Services	1
Manager, Human Resources	1
Manager, Neighborhood Services	1
Manager, Public Services	1
Manager. Great Park Planning & Development	1
Master Facilities Maintenance Specialist	1
Media Services Coordinator	2
Media Services Specialist	2
Multimedia Specialist, IPD	1
Municipal Records Administrator	1
Office Specialist	2
Neighborhood Services Administrator	1
Para-Transit Driver	4
Payroll Specialist	1
Payroll Supervisor	1
Permit Services Supervisor	1
Permit Specialist II	6
Plans Examiner	2
Police Commander	3
Police Lieutenant	8
Police Officer	185
Police Sergeant	30
Press Information Officer, IPD	1
Principal Plan Check Engineer	2
Principal Planner	5
Program Assistant	8
Program Specialist	11
Project Development Administrator	4
Property & Evidence Specialist II	2
Public Safety Assistant	6
Public Safety Dispatcher II	16

CLASSIFICATION	FY 2017-18
Public Safety Lead Records Specialist	2
Public Safety Records Specialist	7
Public Safety Records Supervisor	1
Public Safety Technology Analyst	1
Public Safety Traffic Programs Supervisor	1
Public Works Administrator	1
Purchasing/Contracts Administrator	1
Regulatory Affairs Supervisor	1
Right-of-Way Administrator	1
Risk Management Administrator	1
Senior Accountant	4
Senior Accounting Technician	5
Senior Animal Care Specialist	2
Senior Animal Services Officer	1
Senior Building Inspector	19
Senior Buyer/Contracts Coordinator	2
Senior Civil Engineer	6
Senior Code Enforcement Inspector	4
Senior Construction Inspector	9
Senior Crime Analyst	1
Senior Equipment Mechanic	4
Senior GIS Analyst	2
Senior Human Resources Analyst	1
Senior Management Analyst	14
Senior Media Services Coordinator	2
Senior Office Specialist	7
Senior Permit Specialist	4
Senior Plan Check Engineer	7
Senior Planner	13
Senior Project Manager	7
Senior Public Safety Assistant	2
Senior Registered Veterinary Technician	2
Senior Transportation Analyst	7
Senior Transportation Engineer	2
Senior Vehicle Installation Technician	1
Social Services Supervisor/Counselor	1
Special Assistant to the Chief of Police	1
Special Programs Administrator	1
Street Maintenance Specialist	5
Street Maintenance Superintendent	1

CLASSIFICATION	FY 2017-18
Street Maintenance Supervisor	3
Street Maintenance Technician	7
Supervising Public Safety Dispatcher	5
Supervising Traffic Systems Specialist	1
Supervising Transportation Analyst	3
Supervisor of Accounting Services	1
Traffic Systems Analyst	1
Traffic Systems Specialist	4
Traffic Systems Technician	1
Transit Program Dispatcher	1
Transit Programs Administrator	1
Treasury Specialist	1
Vehicle Installation Technician	1
Veterinary Practice Manager	1
Water Quality Administrator	1
TOTAL AUTHORIZED POSITIONS	**821**

The Full-time Position Control Resolution is being updated to reflect approved changes by the City Council in the context of the 2017-18 Budget. The City Manager may exchange positions for those in another classification. When the City Council approves a new position, or the City Manager exchanges a position between updates of the resolution, such a change shall constitute a revision to the City's Full-time Position Control Resolution that shall be reflected in the next update of the resolution.

Revised 9/12/17

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ESTABLISHING THE SALARY GRADE ORDER STRUCTURE AND SALARY RANGES FOR EMPLOYEES OF THE CITY OF IRVINE, AND SUPERSEDING RESOLUTION NO. 17-46, WHICH IS INCONSISTENT THEREWITH

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

The salary ranges for all employee classifications in the City of Irvine shall be as set forth below:

SALARY RANGES FOR EMPLOYEE CLASSIFICATIONS

Salary Grade	Class Title	FLSA	Salary Effective Date	Minimum Annual Rate	Maximum Annual Rate	Salary Effective Date	Minimum Annual Rate	Maximum Annual Rate
4			8/26/17	$35,318.40	$55,556.80	6/30/18	$36,025.60	$56,659.20
4-ICEA	Office Specialist	N	8/26/17	$35,152.00	$55,244.80	6/30/18	$35,859.20	$56,347.20
4-ICEA	Para-Transit Driver	N	8/26/17	$35,152.00	$55,244.80	6/30/18	$35,859.20	$56,347.20
5			8/26/17	$39,208.00	$61,651.20	6/30/18	$39,998.40	$62,878.40
5-ICEA			8/26/17	$39,020.80	$61,360.00	6/30/18	$39,811.20	$62,587.20
6			8/26/17	$43,097.60	$67,787.20	6/30/18	$43,950.40	$69,139.20
6-ICEA	Accounting Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Code Enforcement Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Community Services Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Duplicating Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Engineering Aide	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Facilities Maintenance Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Information Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Landscape Maintenance Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	License Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Mail Coordinator	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Permit Specialist I	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Public Information Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Public Safety Assistant	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Public Safety Records Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Senior Animal Care Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Senior Office Specialist	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Street Maintenance Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
6-ICEA	Vehicle Installation Technician	N	8/26/17	$42,889.60	$67,454.40	6/30/18	$43,742.40	$68,806.40
7			8/26/17	$46,987.20	$73,902.40	6/30/18	$47,923.20	$75,379.20
7-ICEA	Administrative Secretary	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Animal Services Officer	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Audio-Visual Specialist	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Deputy City Clerk I	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80

ATTACHMENT 9

7-ICEA	Equipment Mechanic	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Equipment Operator I	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Lead Mail Coordinator	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Media Services Specialist	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Permit Specialist II	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Police Recruit	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Program Assistant	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Property & Evidence Specialist I	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Public Safety Dispatcher I	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
7-ICEA	Senior Accounting Technician	N	8/26/17	$46,737.60	$73,528.00	6/30/18	$47,673.60	$75,004.80
8			8/26/17	$50,876.80	$80,038.40	6/30/18	$51,896.00	$81,640.00
8-ICEA	Administrative Aide	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Civilian Investigator I	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Computer Technician	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Engineering Technician	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Equipment Operator II	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Facilities Maintenance Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Forensic Specialist I	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	GIS Applications Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Inspector Trainee	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Landscape Contract Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Landscape Maintenance Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Lead Accounting Technician	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Lead Information Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Payroll Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Property & Evidence Specialist II	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Public Safety Dispatcher II	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Public Safety Lead Records Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Senior Equipment Mechanic	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Senior Permit Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Senior Public Safety Assistant	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Street Maintenance Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Traffic Systems Technician	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Transit Program Dispatcher	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
8-ICEA	Video Production Specialist	N	8/26/17	$50,627.2	$79,622.4	6/30/18	$51,646.40	$81,224.00
9	Administrative Coordinator	E	8/26/17	$54,766.40	$86,112.00	6/30/18	$55,868.80	$87,838.40
9	Assistant Planner	N	8/26/17	$54,766.40	$86,112.00	6/30/18	$55,868.80	$87,838.40
9	Assistant Transportation Analyst	N	8/26/17	$54,766.40	$86,112.00	6/30/18	$55,868.80	$87,838.40
9	Buyer	E	8/26/17	$54,766.40	$86,112.00	6/30/18	$55,868.80	$87,838.40
9	Executive Secretary	E	8/26/17	$54,766.40	$86,112.00	6/30/18	$55,868.80	$87,838.40
9-ICEA	Civilian Investigator II	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Deputy City Clerk II	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Food Services Specialist	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Human Resources Specialist	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Lead Equipment Mechanic	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Lead Facilities Maintenance Technician	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Lead Landscape Maintenance Technician	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Lead Permit Specialist	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Lead Street Maintenance Technician	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Program Specialist	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Senior Animal Services Officer	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
9-ICEA	Senior Vehicle Installation Technician	N	8/26/17	$54,496.00	$85,696.00	6/30/18	$55,577.60	$87,401.60
10	Accountant	E	8/26/17	$58,635.20	$92,248.00	6/30/18	$59,800.00	$94,099.20
10	Assistant Engineer	N	8/26/17	$58,635.20	$92,248.00	6/30/18	$59,800.00	$94,099.20

10	Executive Coordinator	E	8/26/17	$58,635.20	$92,248.00	6/30/18	$59,800.00	$94,099.20
10	FOR Families Specialist	E	8/26/17	$58,635.20	$92,248.00	6/30/18	$59,800.00	$94,099.20
10	GIS Analyst	E	8/26/17	$58,635.20	$92,248.00	6/30/18	$59,800.00	$94,099.20
10-ICEA	Animal Care Center Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Aquatics Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Armorer	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Building Inspector	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Community Services Program Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Construction Inspector	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Disability Services Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Exhibition Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Facilities Reservation Coordinator	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Forensic Specialist II	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	HRIS Specialist	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Master Facilities Maintenance Specialist	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Master Landscape Maintenance Specialist	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Multimedia Specialist - IPD	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Plans Examiner	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Senior Code Enforcement Inspector	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Senior Registered Veterinary Technician	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Supervising Public Safety Dispatcher	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
10-ICEA	Traffic Systems Specialist	N	8/26/17	$58,385.60	$91,832.00	6/30/18	$59,550.40	$93,662.40
11	Associate Planner	N	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Crime Analyst	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Grants Coordinator	N	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Human Resources Analyst I	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Management Analyst I	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Media Services Coordinator	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Payroll Process Analyst	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Public Safety Records Supervisor	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Senior Buyer/Contracts Coordinator	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Supervising Information Specialist	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Public Safety Traffic Programs Supervisor	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11	Treasury Specialist	E	8/26/17	$62,545.60	$98,363.20	6/30/18	$63,793.60	$100,339.20
11-ICEA	Lead Traffic Systems Specialist	N	8/26/17	$62,233.60	$97,864.00	6/30/18	$63,481.60	$99,819.20
11-ICEA	Traffic Systems Analyst	N	8/26/17	$62,233.60	$97,864.00	6/30/18	$63,481.60	$99,819.20
12	Animal Care Center Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Animal Care Volunteer Program Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Animal Services Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Aquatics Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Associate Transportation Analyst	N	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Community Services Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Facilities Maintenance Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Fleet Services Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	ICCP Administrator	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Landscape Maintenance Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Regulatory Affairs & Business Desk Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Senior Accountant	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Senior GIS Analyst	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20

12	Social Services Supervisor/Counselor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Street Maintenance Supervisor	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Supervising Traffic Systems Specialist	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12	Veterinary Practice Manager	E	8/26/17	$66,435.20	$104,499.20	6/30/18	$67,766.40	$106,579.20
12-ICEA	Principal Code Enforcement Inspector	N	8/26/17	$66,102.40	$104,000.00	6/30/18	$67,433.60	$106,080.00
12-ICEA	Senior Building Inspector	N	8/26/17	$66,102.40	$104,000.00	6/30/18	$67,433.60	$106,080.00
12-ICEA	Senior Construction Inspector	N	8/26/17	$66,102.40	$104,000.00	6/30/18	$67,433.60	$106,080.00
13	Associate Engineer	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Associate Plan Check Engineer	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Human Resources Analyst II	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Management Analyst II	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Senior Crime Analyst	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Senior Media Services Coordinator	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13	Senior Planner	E	8/26/17	$70,345.60	$110,614.40	6/30/18	$71,760.00	$112,819.20
13-ICEA			8/26/17	$70,012.80	$110,094.40	6/30/18	$71,406.40	$112,299.20
14	Applications/Programmer Analyst	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Assistant City Clerk	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Building Inspection Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Code Enforcement Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Communications Bureau Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Construction Inspection Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Engineering Geologist	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Forensic Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Municipal Records Administrator	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Payroll Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Permit Services Supervisor	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Public Safety Technology Analyst	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Senior Project Manager	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Senior Transportation Analyst	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14	Supervisor of Accounting Services	E	8/26/17	$74,214.40	$116,729.60	6/30/18	$75,691.20	$119,059.20
14-ICEA			8/26/17	$73,881.60	$116,168.00	6/30/18	$75,358.40	$118,497.60
15	Right-of-Way Administrator	E	8/26/17	$78,124.80	$122,844.80	6/30/18	$79,684.80	$125,299.20
15	Senior Human Resources Analyst	E	8/26/17	$78,124.80	$122,844.80	6/30/18	$79,684.80	$125,299.20
15	Senior Management Analyst	E	8/26/17	$78,124.80	$122,844.80	6/30/18	$79,684.80	$125,299.20
15	Supervising Transportation Analyst	E	8/26/17	$78,124.80	$122,844.80	6/30/18	$79,684.80	$125,299.20
15	Water Quality Administrator	E	8/26/17	$78,124.80	$122,844.80	6/30/18	$79,684.80	$125,299.20
15-ICEA			8/26/17	$77,708.80	$122,241.60	6/30/18	$79,268.80	$124,696.00
16	Animal Care Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Business Services Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Community Services Superintendent	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Emergency Management Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Facilities Construction Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Finance Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	GIS Supervisor	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Open Space Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Press Information Officer, IPD	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Public Information Officer	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Purchasing/Contracts Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Senior Civil Engineer	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Senior Plan Check Engineer	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Senior Transportation Engineer	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00

16	Special Programs Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16	Transit Programs Administrator	E	8/26/17	$81,993.60	$128,980.80	6/30/18	$83,636.80	$131,560.00
16-ICEA			8/26/17	$81,598.40	$128,356.80	6/30/18	$83,220.80	$130,915.20
17	Assessment District Engineer	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Business Administrator	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Facilities Maintenance Superintendent	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Fleet Services Superintendent	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Landscape Maintenance Superintendent	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Principal Planner	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17	Street Maintenance Superintendent	E	8/26/17	$85,904.00	$135,054.40	6/30/18	$87,630.40	$137,758.40
17-ICEA			8/26/17	$85,488.00	$134,451.20	6/30/18	$87,193.60	$137,134.40
18	Animal Care Center Veterinarian	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Assistant City Engineer	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Budget Officer	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Capital Improvement Program Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Community Services Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Environmental Programs Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Finance Officer	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Great Park Project Administrator	E	9/12/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Great Park Property Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Human Resources Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Neighborhood Services Administrator	E	9/12/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Principal Plan Check Engineer	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Project Development Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Public Works Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Risk Management Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18	Strategic Business Plan Administrator	E	8/26/17	$89,772.80	$141,211.20	6/30/18	$91,561.60	$144,040.00
18-ICEA			8/26/17	$89,356.80	$140,524.80	6/30/18	$91,145.60	$143,332.80
19	Community Development Project Administrator	E	8/26/17	$93,662.40	$147,305.60	6/30/18	$95,534.40	$150,259.20
19	Deputy Building Official	E	8/26/17	$93,662.40	$147,305.60	6/30/18	$95,534.40	$150,259.20
19-ICEA			8/26/17	$93,204.80	$146,619.20	6/30/18	$95,076.80	$149,552.00
20	Chief Veterinarian	E	8/26/17	$97,572.80	$153,441.60	6/30/18	$99,528.00	$156,520.00
20	City Engineer	E	8/26/17	$97,572.80	$153,441.60	6/30/18	$99,528.00	$156,520.00
20	Information Technology Administrator	E	8/26/17	$97,572.80	$153,441.60	6/30/18	$99,528.00	$156,520.00
20-ICEA			8/26/17	$97,094.40	$152,692.80	6/30/18	$99,028.80	$155,750.40

SWORN POLICE RANGES

Class Title	Effective Date	Minimum Annual Rate	Maximum Annual Rate	Effective Date	Minimum Annual Rate	Maximum Annual Rate
Police Commander	8/26/17	$132,204.80	$186,222.40	6/30/18	$134,846.40	$189,945.60
Police Lieutenant	8/26/17	$122,220.80	$171,808.00	6/30/18	$124,675.20	$175,240.00
Police Sergeant	8/11/15	$90,958.40	$127,004.80	7/30/16	$95,784.00	$133,723.20
Police Officer	8/11/15	$72,592.00	$100,443.20	7/30/16	$76,440.00	$105,768.00

RANGES FOR MANAGEMENT AND
EXECUTIVE MANAGEMENT EMPLOYEES

Class Title	Effective Date	Minimum Annual Rate	Maximum Annual Rate	Effective Date	Minimum Annual Rate	Maximum Annual Rate
City Manager	8/26/17	$295,339.20	$307,278.40	6/30/18	$301,246.40	$313,414.40
Director of Public Safety/Chief of Police	8/26/17	$171,704.00	$250,369.60	6/30/18	$175,136.00	$255,382.40
Assistant City Manager	8/26/17	$167,502.40	$244,233.60	6/30/18	$170,851.20	$249,121.60
Assistant City Manager, Special Projects	8/26/17	$167,502.40	$244,233.60	6/30/18	$170,851.20	$249,121.60
Director of Administrative Services	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of Community Development	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of Community Services	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of the Great Park	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of Public Affairs & Communications	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of Public Works	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Director of Transportation	8/26/17	$137,508.80	$214,219.20	6/30/18	$140,254.40	$218,504.00
Deputy Director, Public Safety/Chief of Police	8/26/17	$131,268.80	$200,907.20	6/30/18	$133,889.60	$204,921.60
Deputy City Manager	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
Deputy Director, Administrative Services	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
Deputy Director, Community Development	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
Deputy Director, Community Services	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
Deputy Director, Public Works	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
City Clerk	8/26/17	$115,502.40	$179,982.40	6/30/18	$117,811.20	$183,580.80
Chief Information Officer	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Council Services Manager	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Advance Planning	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Animal Care	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Budget & Business Planning	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Building & Safety/Chief Building Official	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Business Services	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Community Services	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Engineering/City Engineer	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Facilities Maintenance & Rehabilitation	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Fiscal Services	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Great Park Planning & Development	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Housing	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Human Resources	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Land & Assets	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Neighborhood Services	9/12/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Public Communications	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Public Services	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Manager, Transit & Transportation	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80
Special Assistant to the Chief of Police	8/26/17	$105,435.20	$164,278.40	6/30/18	$107,536.00	$167,564.80

ELECTED OFFICIALS

Class Title	Effective Date	Minimum Monthly Rate	Maximum Monthly Rate
City Council	1/1/2009*	$880.00	$880.00

*City Ordinance No. 08-04

PART-TIME SALARY RANGES

Class Title	Effective Date	Minimum Hourly Rate	Maximum Hourly Rate	Effective Date	Minimum Hourly Rate	Maximum Hourly Rate
Animal Care Attendant	8/26/17	$14.96	$19.65	6/30/18	$15.26	$20.04
Animal Care Specialist	8/26/17	$18.55	$24.34	6/30/18	$18.92	$24.83
Assistant Food Service Manager	8/26/17	$23.77	$31.20	6/30/18	$24.25	$31.82
Catering Coordinator	8/26/17	$20.72	$27.21	6/30/18	$21.13	$27.75
Community Services Leader I	8/26/17	$12.53	$15.06	6/30/18	$12.78	$15.36
Community Services Leader II	8/26/17	$14.34	$16.95	6/30/18	$14.63	$17.29
Community Services Leader III	8/26/17	$14.96	$19.65	6/30/18	$15.26	$20.04
Community Services Senior Leader	8/26/17	$18.55	$24.34	6/30/18	$18.92	$24.83
Council Executive Assistant I	8/26/17	$11.93	$12.53	6/30/18	$12.17	$12.78
Council Executive Assistant II	8/26/17	$14.61	$15.34	6/30/18	$14.90	$15.65
Council Executive Assistant III	8/26/17	$18.97	$19.91	6/30/18	$19.35	$20.31
Council Executive Assistant IV	8/26/17	$23.34	$24.50	6/30/18	$23.81	$24.99
Department Aide	8/26/17	$11.93	$12.53	6/30/18	$12.17	$12.78
Equipment Services Worker	8/26/17	$18.85	$24.74	6/30/18	$19.23	$25.23
GIS Technician	8/26/17	$14.96	$19.65	6/30/18	$15.26	$20.04
Graphics Designer	8/26/17	$24.66	$32.35	6/30/18	$25.15	$33.00
Information Systems Specialist	8/26/17	$17.99	$23.61	6/30/18	$18.35	$24.08
Intern I	8/26/17	$11.93	$14.56	6/30/18	$12.17	$14.85
Intern II	8/26/17	$14.79	$19.39	6/30/18	$15.09	$19.78
Kitchen Assistant I	8/26/17	$11.93	$15.62	6/30/18	$12.17	$15.93
Kitchen Assistant II	8/26/17	$14.34	$16.95	6/30/18	$14.63	$17.29
Lead Cook	8/26/17	$16.19	$21.27	6/30/18	$16.51	$21.70
Lifeguard	8/26/17	$12.53	$15.06	6/30/18	$12.78	$15.36
Office Assistant I	8/26/17	$12.25	$16.09	6/30/18	$12.50	$16.41
Office Assistant II	8/26/17	$13.24	$17.40	6/30/18	$13.50	$17.75
Office Assistant III	8/26/17	$15.20	$19.94	6/30/18	$15.50	$20.34
Outreach Assistant I	8/26/17	$18.55	$24.67	6/30/18	$18.92	$25.16
Outreach Assistant II	8/26/17	$26.20	$34.84	6/30/18	$26.72	$35.54
Pool Manager	8/26/17	$18.55	$24.34	6/30/18	$18.92	$24.83
Public Information Assistant	8/26/17	$17.99	$23.61	6/30/18	$18.35	$24.08
Public Safety Aide	8/26/17	$11.93	$15.62	6/30/18	$12.17	$15.93
Reservation Specialist I	8/26/17	$13.24	$17.40	6/30/18	$13.50	$17.75
Reservation Specialist II	8/26/17	$15.95	$20.94	6/30/18	$16.27	$21.36
Reservation Specialist III	8/26/17	$17.23	$22.62	6/30/18	$17.57	$23.07
RVT Specialist	8/26/17	$19.47	$25.55	6/30/18	$19.86	$26.06
Senior Council Executive Assistant	8/26/17	$27.54	$28.92	6/30/18	$28.09	$29.50
Senior Graphics Designer	8/26/17	$27.92	$36.64	6/30/18	$28.48	$37.37
Swim Instructor/Lifeguard	8/26/17	$14.34	$16.95	6/30/18	$14.63	$17.29
Veterinary Assistant	8/26/17	$14.96	$19.65	6/30/18	$15.26	$20.04
Zoning Administrator	7/1/08*	Flat: $600 per month				
		Daily Stipend Rates				
	Effective Date	Tier I	Tier II	Effective Date	Tier I	Tier II
Crossing Guard	8/26/17	$75.19	$77.68	6/30/18	$76.69	$79.23
Crossing Guard Alternate	8/26/17	$75.19	N/A	6/30/18	$76.69	N/A

**City Resolution No. 05-97*

Revised: 6/12/17

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 12th day of September 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 12th day of September 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

4.6

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: GREEN RIBBON ENVIRONMENTAL COMMITTEE WORK PLAN AND COMMUNITY CHOICE ENERGY STUDY

Assistant City Manager

City Manager

RECOMMENDED ACTION

1. Approve the Green Ribbon Environmental Committee Work Plan.
2. Direct staff to initiate a study to analyze the feasibility of implementing a Community Choice Energy program in Irvine.

EXECUTIVE SUMMARY

The Green Ribbon Environmental Committee (Committee) has prepared a Work Plan for the City Council's approval that outlines the policy focus of the Committee for the next two years, as required in its Bylaws. The Work Plan is provided as an attachment to this staff report for the City Council to consider and approve (Attachment 1).

If the Work Plan is approved by the City Council, the Committee will provide its input on policy strategies for the areas listed in the Work Plan. Several of the items included in the Work Plan relate to work the City is undertaking or has plans to undertake, such as development of a Sustainability Plan for the Orange County Great Park (Great Park) and an update to the City's Energy Plan. Inclusion of these items in the Committee's Work Plan will enable the Committee to provide its perspective on those items to the City Council.

In addition to the approval of the Committee's Work Plan, the Committee recommends that the City Council direct staff to proceed with a Community Choice Energy (CCE) feasibility and implementation study to better understand the risks and benefits of this program. This is consistent with the City's General Plan Energy Element and Energy Plan, both of which call for exploring opportunities to expand residential and commercial use of renewable energy. If authorized to proceed with this study, staff will issue a Request for Proposals for an assessment to address the financial viability of a CCE program and the risks involved with implementing this program. Once the RFP process has been completed, staff will return to the City Council with a consultant recommendation and a request for funds to be appropriated as described in the Financial Impact section.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its meeting on August 15, 2017, the Green Ribbon Environmental Committee approved its Work Plan for City Council consideration, and recommended that the City Council direct staff to initiate a study that would benchmark energy use in the City and analyze the feasibility of implementing CCE in Irvine.

ANALYSIS

In creating the Committee, City Council Resolution No. 12-04 states: "The mission of the Green Ribbon Environmental Committee is to advise the City Council on sustainability policies related to energy, recycling and waste management, mobility, open space and water issues." Resolution No. 12-04 also specifies that the Committee's values shall reflect the interests and needs of the community.

The Resolution further requires that the Committee develop a Work Plan every two years for review and approval by the City Council. The Committee's proposed Work Plan is summarized below and provided for the City Council's consideration as Attachment 1.

The Committee's Work Plan incorporates elements that the Committee views as priorities for the City. If approved by the City Council, the Work Plan will guide the focus of the Committee over the next two years. Implementation of individual elements of the Work Plan will be brought to the City Council for direction as appropriate. Two Work Plan elements – the Energy Plan Update and the Sustainability Plan at the Great Park – cover initiatives to which funds have been allocated. Staff anticipates retaining consultant experts for both of these endeavors. Staff will return to City Council with the results of the consultant's work products for its consideration.

The Community Choice Energy study, which is recommended by the Committee for approval by the City Council whether or not approved as an element in the Work Plan, will require a budget allocation as discussed in the Financial Impact section of this staff report. More information on CCE is provided below and in Attachment 2.

Overview of Committee Work Plan

Each element of the Work Plan falls under one or more areas under the Committee's purview, as identified in Resolution No. 12-04:

1. Energy Plan Update – Sustainability policies related to energy
2. Sustainability at the Great Park – Sustainability policies related to energy; recycling and waste management; open space; and water issues
3. Active Transportation and Mobility – Sustainability policies related to mobility
4. Water Conservation and Management – Sustainability policies related to water issues
5. Urban Forestry and Green Cover – Sustainability policies related to open space

6. Grants and Pilot Programs – all areas
7. Economic Development and Business-Friendly Initiatives – all areas

If this Work Plan is approved by the City Council, the Committee will consider policies that support each of these areas as described in Attachment 1. The Committee assigned the following three Subcommittees to focus on priority policies should the overall Work Plan be approved: Energy Development and Community Choice Energy, Active Transportation and Connectivity, and Green Infrastructure. The Subcommittees are temporary in nature and will operate in the two-year timeframe of the Work Plan.

Community Choice Energy (CCE)

Related to the work the City will be doing to update the Energy Plan, the Committee recommends that the City Council initiate a study to review the feasibility of implementing a Community Choice Energy (CCE) program in Irvine. Several community members also expressed interest during recent Committee meetings in having the City consider the CCE initiative to increase access to renewable energy for residential and commercial electricity customers in Irvine.

CCE, also known as Community Choice Aggregation (CCA), is an initiative that provides an alternative to electricity provided by the utility by allowing local governments to purchase electricity and sell it to residents and businesses at competitive rates. CCE programs are structured to provide local control over energy procurement to the municipality, but are not considered municipal utilities. The investor owned utility (IOU) will continue to provide transmission and distribution services, power line maintenance, and customer billing services. CCE programs operate in partnership with the utility.

CCE programs have successfully offered reduced electricity rates compared to the IOUs, while increasing the amount of renewable energy levels to their customers. They have also been able to generate revenue that can be invested in other energy-related initiatives for the community, such as energy efficiency programs, incentives to promote the use of renewable energy and support for electric vehicle infrastructure. Objectives of CCE programs in other cities have included offering the public choice about where their energy comes from, increased development of renewable energy, economic benefits from workforce development and local job creation, and environmental benefits associated with the transition to renewable energy such as reduced air pollution.

Variables that warrant review when considering a CCE program include the potential for increased utility fees for entities initiating CCE, risks associated with energy procurement and potential changes to the energy industry, and industry attempts to alter legislative requirements for CCE programs.

The City Council's approval is requested to gather the initial data from Southern California Edison (SCE) and release a Request for Proposal (RFP) to conduct an assessment for the City of Irvine to better understand issues surrounding power procurement and risk management. If approved, staff will return to the City Council after

the RFP process for approval of the consultant and appropriation of funds for the study. Staff will subsequently return to the City Council with findings at specified decision points during the study's progression and once the full study has been completed, to discuss implementation options available to the City.

ALTERNATIVES CONSIDERED

The City Council can decide not to approve the Committee Work Plan or provide direction on alternate items for the Committee to consider in its Work Plan. If there are any additional items recommended, staff will work with the Committee on incorporating any alternate items into the Work Plan at its next meeting scheduled for November 21, 2017.

Should City Council not wish to issue an RFP to initiate the study of the CCE program at this time, staff can continue to monitor programs in the region and provide further information to the City Council on lessons learned.

FINANCIAL IMPACT

Staff expects to hire consultant teams to assist with several tasks related to the Work Plan areas recommended by the Committee, as well as ongoing projects: Energy Plan Update, the Sustainability Plan for the Great Park and the CCE study, if approved by the City Council. Approximately $80,000 has already been allocated in the budget for the Energy Plan Update and Sustainability Plan for the Great Park, respectively. Consideration is being given to expanding the scope of work for these projects to ensure the City receives a comprehensive energy study, including a facilities energy audit, and a plan for the Great Park that outlines sustainable development for new sites. A budget adjustment may be required to complete the full scope of work. Staff will have more information once bids are received.

If directed to initiate the CCE study, staff will begin the CCE review process by requesting the City's electricity data from SCE (approximately $2,700 in data request fees). This data will also be used for the update to the Energy Plan. Staff will issue an RFP to retain an expert to review the City's data and assess the feasibility of a CCE program in Irvine. While we are currently estimating between $150,000 and $200,000 for the cost of this work, once we have received bids through the RFP process, the amount will be better defined and staff will return with a consultant recommendation and a request for funding from unallocated General Funds.

REPORT PREPARED BY Sona Coffee, Environmental Programs Administrator

ATTACHMENT

1. Green Ribbon Environmental Committee Work Plan
2. Overview of Community Choice Energy

Green Ribbon Environmental Committee Work Plan

As stated in City Council Resolution No. 12-04: "The mission of the Green Ribbon Environmental Committee is to advise the City Council on sustainability policies related to energy, recycling and waste management, mobility, open space and water issues." The Green Ribbon Environmental Committee (Committee) Bylaws state that a Work Plan shall be developed every two years and presented to the City Council for approval. This Work Plan identifies priority areas for the City of Irvine and is intended to guide the focus of the Committee for the next two years.

The Work Plan identifies policy areas related to the sustainability initiatives below, and identifies Subcommittees to assist with areas of priority. The Subcommittees will operate in the two-year timeframe of the Work Plan and are temporary in nature. The Work Plan is subject to annual review by the Committee. Any additional recommendations will be brought to the City Council for consideration.

Work Plan Items:

1. Energy Plan Update
2. Sustainability at the Great Park
3. Active Transportation and Mobility
4. Water Conservation and Management
5. Urban Forestry and Green Cover
6. Grants and Pilot Programs
7. Economic Development and Business-Friendly Initiatives

Subcommittees:

1. Energy Development and Community Choice Energy
2. Active Transportation and Connectivity
3. Green Infrastructure

The intended scope of work for the Work Plan items is summarized below.

Green Ribbon Environmental Committee Work Plan

1. Energy Plan Update:

An Energy Plan for the City was prepared in 2008. Much has changed since then regarding technology, including energy production. An update to the Energy Plan will review renewable energy opportunities for the City, proposed goals and actionable measures for the City to meet these goals. Staff will update the City's Energy Plan and work with the Committee to incorporate input on policy areas. The Energy Plan itself will be subject to the City Council's approval. Policy areas for the Committee to review include:

- Exploration of Community Choice Energy initiative,
- Goals for use of renewable energy, and
- Support for roll-out of EV infrastructure.

2. *Sustainability at the Great Park*:

A measure passed by Irvine voters in 2010 specified a desire for the Orange County Great Park (Great Park) to incorporate sustainability principles in the following categories: biodiversity, connection to nature, land diversity, air quality, water, well-being, energy, materials, transit-oriented, urban forestry, green building, and monitoring. The Committee will review sustainable initiatives implemented at the Great Park and recommend to the City Council sustainability principles to strategically guide future initiatives.

3. Active Transportation and Mobility:

The Committee identified Active Transportation as an important policy to improve the quality of life and attractiveness of the City, which contributes to creating places of character. The Committee will explore policies that support the City's participation in alternative transportation modes in an effort to reduce emissions and traffic congestion in Irvine including, but not limited to:

- Alternate fuels
- Reduced emission or zero emission vehicles
- Mass transit services
- Carpooling
- Bicycling
- Walking

4. Water Conservation and Management:

Water issues are important to the community, and the Committee identified that this issue will continue to gain importance because of drought conditions and climate change. The Committee is also interested in issues pertaining to use of recycled water in the City and increasing access Citywide as feasible.

5. Urban Forestry and Green Cover:

The Committee will review the City's Urban Forestry practices to understand the City's inspection, maintenance and tree replacement policies and identify any policy recommendations to further clarify or enhance the City's goals. The Committee will focus on policy issues surrounding shade and community-wide tree care.

6. Grants and Pilot Programs:

When looking at grant opportunities across all environmental areas – energy, waste management, mobility, open space, water – the Committee aims to seek out grants that serve policy objectives of the City. Staff will work with the Committee to identify policy objectives that will help set priorities for grant applications and any pilot programs to be proposed to the City Council for its consideration. The Committee may also bring to the City's attention grants and pilot programs that would provide funding to implement energy efficiency and renewable energy technologies, and support efforts to reduce waste generation among other sustainability initiatives.

Below are two policy objectives with examples of funding opportunities that would meet the specified objective.

Seek grants or initiate pilot programs using technology that has the potential to reduce non-renewable peak energy use or that promotes the use of clean fuel:

- Energy Storage Pilot Program: Review funding opportunities for energy storage technology at City facilities and throughout the community.
- EV Charging Infrastructure & EV Pilot Programs: Identify funding opportunities to install EV charging stations at the Civic Center and other public locations citywide, explore the use of electric vehicle car-sharing to promote mobility, and research funding for fleet electrification.
- Renewable Energy: Search for funding opportunities to increase use of renewable energy at City facilities and community wide.

Seek grants or initiate pilot programs to educate youth, residents, and/or businesses on recycling requirements and benefits:

- Food Waste Recycling: City applied for grant funds to provide informational resources to businesses to assist in compliance with mandatory recycling laws and educate businesses about food waste prevention programs.
- Recycling at Local Schools: Engage the School District and explore grant funding to provide recycling containers at local schools to support youth recycling education.

7. Economic Development and Business Friendly Initiatives:

Staff will work with the Committee to develop draft policies that are business-friendly and promote sustainable economic development opportunities for the City. Below is an example of such a policy and the types of initiatives that would fall within it.

Work with the business community to identify environmentally friendly initiatives that reduce the cost of or reliance on energy, or provide other benefits for businesses in Irvine:

- Community Choice Energy (CCE): Research economic development opportunities of CCE to better understand the benefits and incentives to the business community.

<u>Cross-Cutting Initiatives:</u>

The Committee identified several areas that will be considered under each issue area, including exploration of grants and pilot programs, community outreach and education and youth action. These opportunities will be incorporated throughout each of the Work Plan items.

Overview of Community Choice Energy

Community Choice Energy (CCE), also known as Community Choice Aggregation (CCA), is a program that provides local governments with control over the procurement and generation of energy resources for their communities. CCE is an alternative to traditional investor owned utility (IOU) power procurement.

The CCE entity will purchase power, set rates, and collect revenue. The utility will maintain the electricity grid, deliver energy and bill customers. CCEs offer automatic enrollment to businesses and residences in its jurisdiction, with the ability for the customer to opt out and continue to purchase electricity from the utility. Customers will have the option of choosing increased percentages of renewable energy. CCE programs in California generally procure and resell a power mix between 50 percent and 100 percent renewable energy to their customers. Southern California Edison's (SCE) energy mix includes 28 percent renewable energy resources.

Local governments that have created CCE programs have articulated the following goals and potential benefits:

- Potential to reduce electricity rates for commercial and residential customers,
- Local control over energy portfolio,
- Increased procurement of renewable energy (State's renewable portfolio standard (RPS) requires renewable energy resources to comprise 33 percent of total procurement by 2020),
- Environmental and public health benefits associated with increased use of renewable energy, which reduces air pollution,
- Development of new renewable power resources (solar, energy efficiency, combined heat & power, and management of electric vehicle charging),
- Economic benefits from workforce development in local green jobs and associated economic activity,
- Test labs for innovation and integration of clean technology (e.g. battery storage, EV infrastructure),
- Increased public conversation on options, programs, fees and community ownership of renewable resources, and
- Method to address future environmental regulations and State's greenhouse gas reduction targets.

Local governments have the option to join existing CCE programs, partner with other government entities to form a CCE through a Joint Powers Authority, or initiate an individual/single jurisdiction CCE program. A feasibility study and technical analysis will explore the potential benefits and risks associated with participating in CCE, including determining whether this program could generate revenue for the city that can be invested in other energy-related initiatives.

Jurisdictions that formed CCE programs early on have seen the benefits of flexible renewable energy contracts and have been able to offer lower electricity rates with an increase in the amount of renewable energy, but potential CCE programs need to factor in changing variables such as the increased utility fees associated with the Power Charge Indifference Adjustment (PCIA) fee or the Portfolio Allocation Method (PAM) fee. PCIA is an exit fee charged by the utilities to entities that leave the bundled service of the utility for another provider of electricity generation service. As part of the technical analysis, cities can factor in higher PCIA fees and energy costs before launching their CCE program. Newly formed CCEs in San Francisco, San Mateo and Santa Clara Counties included these factors as part of their technical analyses and concluded that their programs could move forward.

CCEs in California

CCE has been operating in California since 2002 following passage of Assembly Bill 117. There are eight operational CCE programs in California, including: Marin Clean Energy (2010), Sonoma Clean Power (2014), Lancaster Choice Energy (2015), CleanPower San Francisco (2016), Peninsula Clean Energy in San Mateo County (2016), Apple Valley Choice Energy (2017), Silicon Valley Clean Energy (2017), and Redwood Coast Energy Authority (2017).

These CCE programs represent nearly 80 cities and counties in California, and generally offer a higher level of renewable energy at rates lower than the utility. A majority of existing CCEs are located in Northern California, but two Southern California programs are operational with several other programs in various stages of review.

Lancaster Choice Energy began serving customers in May 2015. Following the successful program launch, the City of Lancaster and the City of San Jacinto partnered to create the California Choice Energy Authority (CCEA). CCEA is a Joint Powers Authority (JPA) designed to allow other cities in SCE territory participate in CCE programs. The City of Pico Rivera recently joined CCEA. Other Southern California cities that have expressed interest in CCEs by adopting a resolution to participate in a CCE feasibility study include: Hermosa Beach, Manhattan Beach, Santa Monica, Redondo Beach, Torrance, Carson, Beverly Hills, Palos Verdes Estates, Lomita, West Hollywood, Malibu, Rolling Hills Estates, and Culver City. The City of Huntington Beach recently voted to enter a non-disclosure agreement with SCE to obtain customer energy use data to determine the economic viability of a CCE program for the city, a first step to a more complete feasibility analysis.

There are several programs preparing to launch in California including Alameda County, Los Angeles County, Yolo County, and San Jose. San José Clean Energy (SJCE) will be the largest single jurisdiction in California to operate a CCE and is expected to launch in April 2018. The newly formed Los Angeles County Community Choice Energy (LACCE) program is set to launch in January 2018 and is open to other cities joining its JPA Board of Directors.

Community Choice Energy in California

Sonoma Clean Power

- Santa Rosa
- Sonoma County
- Mendocino County
- Town of Windsor
- Sebastopol
- Petaluma
- Cloverdale
- Cotati
- Town of Sonoma
- Rohnert Park
- Fort Bragg

Silicon Valley Clean Energy

- Cupertino
- Los Gatos
- Mountain View
- Santa Clara County
- Los Altos Hills
- Los Altos
- Campbell
- Gilroy
- Morgan Hill
- Sunnyvale
- Monte Sereno
- Saratoga

Redwood Coast Energy Authority

Peninsula Clean Energy

- San Mateo County
- City of San Mateo
- Atherton
- Belmont
- Brisbane
- Burlingame
- Colma
- Daly City
- Foster City
- East Palo Alto
- Hillsborough
- Menlo Park
- Half Moon Bay
- Millbrae
- Pacifica
- Portola Valley
- Redwood City
- San Bruno
- San Carlos
- Woodside
- South San Francisco

California Choice Energy Authority

- Lancaster
- Pico Rivera
- San Jacinto

MCE Clean Energy

- Mill Valley
- Walnut Creek
- County of Marin
- Richmond
- Benicia
- San Rafael
- El Cerrito
- Town of Ross
- Larkspur
- Sausalito
- Town of San Anselmo
- County of Napa
- San Pablo
- Town of Tiburon
- Novato
- Belvedere
- Town of Corte Madera
- Town of Fairfax
- Contra Costa County

Clean Power San Francisco

- City/County

Apple Valley Choice Energy

- Apple Valley

Launching in 2018

- San Jose Community Energy
- Los Angeles County Community Choice Energy
- East Bay Community Energy
- Monterey Bay Community Power
- Valley Clean Energy Alliance

4.7

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR UNIVERSITY DRIVE WIDENING BETWEEN MACARTHUR AND CAMPUS

Director of Public Works

City Manager

RECOMMENDED ACTION

1. Approve the construction plans, specifications and contract documents for the widening of University Drive between MacArthur and Campus, Capital Improvement Project 311306.

2. Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.

3. Authorize the City Manager to execute the Reimbursement Agreement with Irvine Ranch Water District for installation and adjustment of water facilities within the project area.

4. Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

EXECUTIVE SUMMARY

The proposed widening of University Drive between MacArthur and Campus is one of several traffic capital projects approved by the City Council to address its commitment to traffic management and reducing traffic congestion on major roadways in the City. Plans, specifications and contract documents for the construction phase of the project are complete and ready for City Council approval. These documents are available for public review in the Public Works department.

The proposed work consists of widening University Drive from four to six lanes by adding a new third travel lane in both directions between MacArthur Boulevard and Campus Drive. The project also includes traffic mitigation improvements at the University/Campus intersection conditioned on the Park Place development (located at Jamboree and Michelson). The intersection portion of the improvements are funded by the Park Place developer and incorporated into the proposed project to minimize construction impacts to the public. The construction contract documents also include a

Bid Alternate for work on behalf of Irvine Ranch Water District (IRWD) for new water and sewer facilities to be funded by IRWD and constructed concurrent with the project. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and award of a contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The proposed project will construct additional travel lanes to enhance roadway capacity and address existing and forecasted traffic congestion along University Drive between the MacArthur Boulevard northbound ramps and Campus Drive. The proposed scope of work includes widening the roadway to add a new third travel lane in both directions between MacArthur and Campus, rehabilitation of the existing roadway pavement, new storm water drainage systems, new energy efficient Light Emitting Diode (LED) street lights to be installed by Southern California Edison (SCE), new low-water use irrigation systems and landscaping and upgraded traffic signals with enhanced video detection technology to assist with improved signal timing along the corridor. The project also includes work on IRWD facilities located within the project limits. This work is included as an Alternate Bid item and may be awarded with the construction contract upon approval of the bid prices by IRWD. An agreement (Attachment 2) between the City and IRWD provides for reimbursement to the City for all project costs related to the IRWD facilities.

The construction contract estimate prepared by the consultant design engineer for this project is $13,141,050 for the Base Bid and $449,883 for IRWD's related costs for a total construction contract estimate of $13,590,933. A budget allowance of $500,000 for SCE street light related costs, $1,890,000 for construction engineering (material and equipment testing, inspection services and surveying) and $1,200,000 for construction contingency is recommended, as shown in the Project Funding Summary (Attachment 3). The City's construction contracting policies and procedures limit the award of the construction contract by staff to a maximum of 10 percent over the engineer's estimate. These policies also restrict the use of the construction contingency only for unforeseen circumstances that may arise and are necessary to complete the work within the approved project scope and budget.

Staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Notice Inviting Bids, Construction Contract, Plans, Specifications, and the proposed Schedule of Work listing the individual bid items for this project is included as Attachment 4. If approved by the City Council, construction is

anticipated to begin in January 2018 (after the upcoming holiday season) with completion by May 2019.

A construction phasing and detour plan is included with the bid documents to provide prospective bidders with guidance on acceptable lane closure and project phasing requirements. Two lanes of traffic will be maintained in both directions during daytime hours. To facilitate construction activities and to ensure the safety of construction personnel and the public, occasional night work will reduce traffic to one lane in each direction allowing the contractor to place temporary lane restrictions while work is in progress. Bicyclists will have the option to use the adjacent off-street bicycle trail as a detour route throughout the construction period or may elect to share the road with motorists traveling through the construction zone area. Work is proposed to take place primarily Monday through Friday between 7 a.m. and 7 p.m. with night work permitted between the hours of 10 p.m. and 5 a.m.

ENVIRONMENTAL REVIEW

In accordance with the California Environmental Quality Act (CEQA), the City adopted a Mitigated Negative Declaration (MND) for the project on November 12, 2014, and adopted an Addendum to the MND on November 24, 2015. These documents serve as the environmental review for the project, as required pursuant to the provisions of CEQA, the CEQA Guidelines, 14 CCR Section 15000 et. Seq. (CEQA Guidelines), and the City of Irvine procedures for CEQA implementation. All mitigation measures required by the Amended MND have been incorporated in the proposed project construction plans.

ALTERNATIVES CONSIDERED

The City Council could direct staff to defer the widening project to a future date, or may direct staff to modify any of the elements of the proposed scope. The City Council may also approve the construction plans and related documents, authorize staff to solicit competitive bids, and direct staff to bring back the results of the competitive bid process to the City Council for its review and consideration prior to award of the construction contract.

FINANCIAL IMPACT

Project expenditures to date for preparation of the construction plans and contract documents total $2,200,000. The construction contract estimate prepared by the consultant design engineer is $13,141,050 for the Base Bid and $449,883 for the Bid Alternate for a total construction contract estimate of $13,590,933. The recommended budget allowance of $500,000 for street light installation, $1,890,000 for construction engineering and $1,200,000 for construction contingency brings the total estimated cost for the construction phase to $17,180,933. Funding for the construction phase is available in the City Council approved CIP 311306 from a combination of sources including Developer Contributions, Measure M2 grant funds, Systems Development

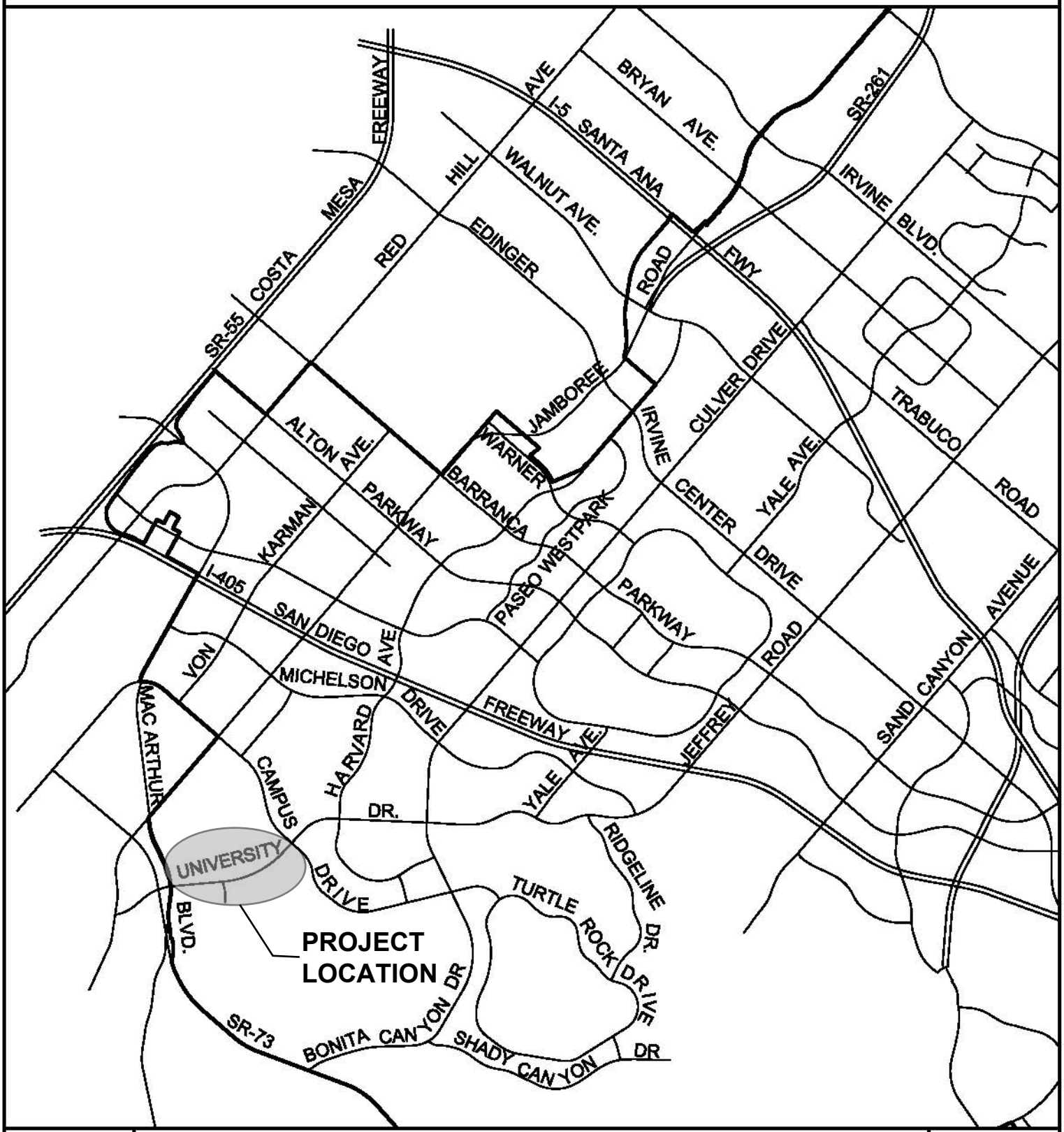
Charges (SDC) Fees, and IRWD reimbursement funds. A complete funding summary for this project is provided in Attachment 3.

REPORT PREPARED BY Darrell Hartman, P.E., Senior Civil Engineer

ATTACHMENTS

1. Site Map
2. IRWD Reimbursement Agreement
3. Project Funding Summary
4. Notice Inviting Bids, Construction Contract, Plans, Specifications and Schedule of Work

UNIVERSITY DRIVE WIDENING



VICINITY MAP

ATTACHMENT 1

File No.

REIMBURSEMENT AGREEMENT BETWEEN
IRVINE RANCH WATER DISTRICT
AND THE CITY OF IRVINE
FOR
RELOCATION AND ADJUSTMENT OF STREET UTILITIES FOR
UNIVERSITY DRIVE WIDENING PROJECT
CIP NO. 311306

This Agreement is made and entered into as of this ____ day of _____, 2017, by and between IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law, hereinafter referred to as "DISTRICT," and the CITY OF IRVINE, a municipal corporation, hereinafter referred to as "CITY."

W I T N E S S E T H:

WHEREAS, CITY proposes to construct street improvements for the University Drive Widening Project, CIP No. 311306 (the "Project"), within the jurisdictional boundaries of DISTRICT and the City of Irvine; and

WHEREAS, such construction will necessitate the following: excavation and trench safety measures; removal of 9 ea. existing air-vacuum valve assemblies; removal of 4 ea. existing 4" blow offs; removal of 2 ea. existing 8" blow offs; protection of an existing 24" pipe and manual air release; removal of 1 ea. existing fire hydrant, removal of 21 ea. existing cathodic protection test stations; removal of 38 lf. existing 16" CML&C domestic water pipelines; removal, replacement and adjustment to grade of 26 ea. valve cans; removal, replacement and adjustment to grade of 4 ea. valve assemblies; installation of 10 ea. new 2" air release and vacuum valves; installation of 4 ea. new 4" blow off/ bottom drain assemblies; installation of 2 ea. new 8" blow off/ bottom drain assemblies; installation of 1 ea. new traffic rated meter box (sized for 2" meter) with metal lid; installation of 1 ea. new fire hydrant assembly; installation of 21 ea. new cathodic protection stations; construction of 50 lf of new 16" (1/4" thick) CML&C steel domestic water pipeline; installation of 1 ea. new brass plug on an existing saddle; construction of 70 sf of new 6" reinforced PCC pad over 6" of sand; construction of 12 lf of new 6" curb; adjustment to grade 6 ea. IRWD sewer manhole frames and covers; adjustment to grade

ATTACHMENT 2

1 ea. IRWD recycled water manhole frame and cover; removal of 2 ea. existing valves and installation of 2 ea. blind flanges on existing tees; abandonment of 1 ea. existing 6" fire service lateral; removal of 5 ea. existing corp stops and installation of plugs per IRWD W-11; installation and adjustment to grade of 3 ea. new valves; removal of 2 ea. existing manual air releases; removal of 1 ea. existing valve and installation of 1 ea. new flanged spool; Installation of 3 ea. new ball corp stops on existing saddles, as depicted on Exhibit "A" attached hereto incorporated by reference herein (hereinafter referred to as the "IRWD FACILITIES"); and

WHEREAS, the parties have determined that it would be more expedient for CITY to construct the IRWD FACILITIES rather than for DISTRICT to do so; and

WHEREAS, DISTRICT is amenable to the CITY constructing the IRWD FACILITIES with the CITY agreeing to advance the costs; and

WHEREAS, DISTRICT agrees to fully reimburse the CITY through payments billed by the CITY and approved by DISTRICT for the entire cost of the IRWD FACILITIES; and

WHEREAS, except as otherwise provided herein, upon the completion of the IRWD FACILITIES, the IRWD FACILITIES shall become the property of DISTRICT in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties hereto agree as follows:

SECTION 1. IRWD FACILITIES. In conjunction with the Project, CITY agrees to initiate and pursue to completion the design and construction of the IRWD FACILITIES.

SECTION 2. PLANS. CITY agrees that the IRWD FACILITIES shall be completed pursuant to approved project plans and specifications (the "Plans and Specifications") which shall be approved by DISTRICT and used in awarding the construction contract. The Plans and Specifications shall be deemed to incorporate the applicable portions of DISTRICT's latest edition of "Construction Manual for the Construction of Water, Sewer, and Reclaimed Water Facilities" (the "Construction Manual"). The IRWD FACILITIES shall be contracted by CITY together with non-reimbursable work to be completed by CITY within the Project pursuant to plans prepared by DISTRICT's design engineer.

SECTION 3. BIDDING AND AWARD. The parties agree that the construction of the IRWD FACILITIES shall be included in CITY's contract(s) awarded for the Project and that the IRWD FACILITIES shall be bid as a separate item or items that can be deleted. During the bidding process, CITY shall deliver to IRWD one (1) complete set of the bid documents that include the IRWD FACILITIES, including all related addenda concurrently with the distribution thereof to prospective bidders. Upon opening of bids by CITY, CITY will submit the bids or a spread sheet summary of the bids to DISTRICT. DISTRICT will have a period of ten (10) calendar days from its receipt of the bid results for review and approval of the IRWD FACILITIES bid item(s) submitted by the bidder identified to DISTRICT by CITY as CITY's proposed successful bidder. CITY agrees that bids received for the construction of the IRWD FACILITIES bid item(s) shall be subject to the approval of DISTRICT prior to award of the Project construction contract(s) that include the IRWD FACILITIES; and further agrees that in the event DISTRICT does not approve such bids, either party may terminate this Agreement upon twenty-four (24) hours' prior written notice, in which event CITY shall have no further obligation to construct the IRWD FACILITIES, and DISTRICT may elect to install the IRWD FACILITIES with its own contractor. If DISTRICT approves of the IRWD FACILITIES bid item(s) of CITY's successful bidder, CITY agrees to cause the IRWD FACILITIES to be constructed as part of the contract awarded to such bidder. The total estimated construction cost for the IRWD FACILITIES is $449,883, provided, however, the amount to be reimbursed by DISTRICT shall be based on the actual costs of construction. Upon award of the construction contract, CITY shall provide DISTRICT with one (1) original copy of the fully executed contract documents and one (1) copy of the bid package relating to the IRWD FACILITIES received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS. DISTRICT agrees to reimburse CITY for any change order(s) for revision(s) requested by DISTRICT or otherwise required to construct the IRWD FACILITIES. CITY shall promptly furnish DISTRICT with copies of any proposed change order(s) to such contract within five (5) working days of the initiation of the changed conditions to such contract, which shall be subject to DISTRICT approval if and to the extent the IRWD FACILITIES are affected therefrom.

DISTRICT shall promptly review proposed change order(s) and provide CITY with a response within five (5) working days or sooner of receiving proposed change order(s) information from CITY. DISTRICT agrees not to unreasonably cause delay(s) to the construction schedule of the Project in reviewing proposed change order(s) for the IRWD FACILITIES. Notwithstanding any other provision herein, any approval required to be given by the DISTRICT under this

Section shall be deemed given if no response to the CITY's request for such approval is received by the CITY within eight (8) working days following the written request for such approval unless the parties agree otherwise in a writing executed by both parties.

SECTION 5. REIMBURSEMENT. DISTRICT agrees to reimburse CITY for the following costs (collectively, the "Costs"): (1) the actual costs of construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by CITY in connection with the construction of the IRWD FACILITIES, plus (2) an administration fee which shall be equal to four percent (4%) of the actual cost of construction (costs paid directly to CITY's contractor for construction, only, excluding any cost for design, surveying, geotechnical or other work) of the IRWD FACILITIES and which shall be deemed to cover all costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering. CITY shall keep a separate accounting of all Costs incurred by CITY in relation to the IRWD FACILITIES.

Within sixty (60) days of DISTRICT's acceptance of the IRWD FACILITIES as provided in Section 8, a final accounting of the Costs shall be made by CITY and submitted to DISTRICT along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of IRWD FACILITIES. Amounts paid pursuant to progress payment invoices shall be subject to adjustment in the final accounting. Within thirty (30) days of said final accounting, DISTRICT agrees to pay to CITY the total amount of the Costs.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. CITY shall require in its contract for the construction of the IRWD FACILITIES that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of DISTRICT, in connection with the construction of the IRWD FACILITIES.

SECTION 7. INSPECTION. DISTRICT shall have sole and absolute discretion as to all aspects of design and construction of the IRWD FACILITIES, and DISTRICT shall be entitled to inspect the construction of IRWD FACILITIES as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection thereof. DISTRICT shall have access to all phases of the Project work to be performed by CITY for the purpose of such inspection; provided, however, all questions regarding the work being

performed will be directed to CITY's resident engineer. DISTRICT will promptly notify CITY of any portion of the work on the IRWD FACILITIES which appears not to conform to the Plans and Specifications. The determination of DISTRICT as to conformity of the IRWD FACILITIES with the Plans and Specifications shall be made in DISTRICT's sole and absolute discretion. DISTRICT agrees not to unreasonably withhold its approval as to such conformity of the IRWD FACILITIES with the Plans and Specifications. CITY shall require its contractor to construct the IRWD FACILITIES so that the IRWD FACILITIES conform to the Plans and Specifications. CITY agrees to assume full responsibility for certifying or obtaining certification of the compaction of backfill material over the IRWD FACILITIES.

SECTION 8. ACCEPTANCE. DISTRICT agrees to accept the IRWD FACILITIES when the IRWD FACILITIES have been completed by CITY in accordance with all requirements of the Plans and Specifications, including any change orders approved by DISTRICT as provided in Section 3 hereof. At the time of completion and acceptance of the IRWD FACILITIES, CITY agrees to furnish DISTRICT with one (1) copy of the contractor's redlined set of blueline "record" drawings (showing all revisions, manufacturer and type of valves, pipe and fittings as required by DISTRICT) and one (1) copy of the compaction reports and certificate, survey notes and cut sheets.

SECTION 9. OWNERSHIP. It is mutually agreed between the parties hereto that notwithstanding the fact that CITY shall accomplish the construction of the IRWD FACILITIES subject to reimbursement, the IRWD FACILITIES to be completed hereunder, together with the necessary franchises, licenses, easements, rights-of-way, and other privileges, shall at all times be subject to the applicable rates, rules and regulations of DISTRICT, as modified or amended from time to time. CITY hereby disclaims any interest in the IRWD FACILITIES and does hereby transfer and assign to DISTRICT any and all right, title, and interest it may have in the IRWD FACILITIES. DISTRICT shall own, operate and maintain the IRWD FACILITIES following acceptance thereof.

SECTION 10. GUARANTEES. CITY will, pursuant to the requirement(s) of the Plans and Specifications, cause its contractor(s) for the IRWD FACILITIES to guarantee the IRWD FACILITIES against defects in workmanship and materials for a period of one (1) year from the date of acceptance by CITY, which acceptance shall be given only after acceptance by DISTRICT as provided in Section 8. It is further agreed that CITY shall cause the IRWD FACILITIES to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of the IRWD FACILITIES

which during said one (1) year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from CITY's contractors or material manufacturers, with respect to the IRWD FACILITIES. The guarantee and obligations under this section shall in no way be relieved by DISTRICT's inspection and/or acceptance of the IRWD FACILITIES. This section sets forth the entire guarantee and warranty of CITY with respect to the IRWD FACILITIES. The express or implied warranties of other persons with respect to IRWD FACILITIES shall in no way be limited by the guarantee and warranty of CITY contained in this section. If requested by DISTRICT, CITY agrees to assign to DISTRICT the contractor's guarantee and/or any other guarantees or warranties relating to the IRWD FACILITIES.

SECTION 11. INDEMNIFICATION. CITY shall indemnify, defend and hold DISTRICT, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of the IRWD FACILITIES as a result of any work or action performed by CITY or on behalf of CITY, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of DISTRICT, its officers, agents, employees or engineers or by any act or omission for which DISTRICT, its officers, agents, employees or engineers are liable without fault.

DISTRICT shall indemnify, defend and hold CITY, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by DISTRICT, its officers, agents, or employees, with respect to the IRWD FACILITIES construction; or (ii) following DISTRICT acceptance of the IRWD FACILITIES, with respect to maintenance and operation of the IRWD FACILITIES, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any negligence of CITY, its officers, agents, employees or engineers, or by any act or omission for which CITY, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. CITY shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including the IRWD FACILITIES and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include DISTRICT, its officers, agents, employees and engineers, as additional insureds on all insurance policies that CITY requires its contractor(s) to provide. As evidence of such insurance coverage, CITY shall, prior to commencement of construction of the

IRWD FACILITIES, provide DISTRICT with certificates of insurance and insurance endorsements from CITY's contractor(s) in a form acceptable to DISTRICT.

SECTION 13. TERMINATION. DISTRICT shall have the right to terminate this Agreement at any time, subject to the provisions of this section, by providing five (5) business days' prior written notice to CITY, except as noted in Section 3. If at the request or direction of a party other than CITY, the construction of the IRWD FACILITIES is not accomplished or completed, DISTRICT shall remain obligated for the actual amount of the Costs incurred by CITY to the date of termination.

If CITY's Project is canceled or modified so as to eliminate the necessity of the construction of the IRWD FACILITIES, CITY shall have the right to terminate this Agreement and thereby terminate its obligation to construct the IRWD FACILITIES, by providing five (5) business days' prior written notice to DISTRICT. In such case, DISTRICT will not be obligated for any design or any other Costs incurred by CITY. If IRWD elects to construct the IRWD FACILITIES, DISTRICT may, but shall not be obligated to, acquire design or other work from CITY by separate agreement.

SECTION 14. NOTICE. Any notice or other written instrument required or permitted by this Agreement to be given to either party shall be deemed received when personally served or twenty-four (24) hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

DISTRICT: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

CITY: City of Irvine
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618
Attn: Darrell Hartman, Senior Civil Engineer

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT. This Agreement shall be binding upon and inure to the benefit of the successor and assigns of CITY and DISTRICT. This Agreement constitutes the entire Agreement between CITY and DISTRICT and supersedes all prior understandings and agreements between the parties with

respect to the subjects hereof. This Agreement may be modified only in writing signed by both parties hereto.

SECTION 16. LEGAL FEES. In the event of any declaratory or other legal or equitable action instituted between CITY and DISTRICT in connection with this Agreement, the prevailing party shall be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

SECTION 17. DEEMED APPROVAL. Any approval required to be given by either party pursuant to this Agreement shall be deemed given if no response to the party's request for such approval is received by the requesting party within fifteen (15) days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or other unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

SECTION 19. APPLICABLE LAW. This Agreement shall be construed and enforced in accordance with the laws of the State of California.

SECTION 20. WAIVER. The waiver of any provision of this Agreement by either party shall not be deemed to be a waiver of any other provision or of any preceding or subsequent breach hereunder.

IN WITNESS WHEREOF, the parties to the Agreement have executed this Agreement on the date herein above written.

IRVINE RANCH WATER DISTRICT

By_____ Dated _____
Paul Cook, General Manager

ATTEST:

By_____ Dated _____
Secretary/Assistant Secretary

APPROVED AS TO FORM:

By_____ Dated _____
Legal Counsel, IRWD

CITY OF IRVINE
A Municipal Corporation

By_____ Dated _____
Sean Joyce
City Manager of the City of Irvine

By_____ Dated _____
Manuel Gomez
Director of Public Works

ATTEST:

By_____ Dated _____
Molly McLaughlin
City Clerk of the City of Irvine

APPROVED AS TO FORM:

By_____ Dated _____
Jeffrey Melching, RUTAN & TUCKER, LLP
City Attorney of the City of Irvine

EXHIBIT "A"

REIMBURSEMENT AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT (IRWD)
AND THE CITY OF IRVINE
FOR
RELOCATION AND ADJUSTMENT OF STREET UTILITIES FOR UNIVERSITY DRIVE WIDENING PROJECT
CIP NO. 311306

ENGINEERS ESTIMATE

ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT COST	EXTENDED AMOUNT
1A	EXCAVATION/ TRENCH SAFETY MEASURES	1	LS	$20,000.00	$ 20,000.00
2A	REMOVE EXISTING AIR-VACUUM VALVE ASSEMBLY	9	EA	$ 800.00	$ 7,200.00
3A	REMOVE EXISTING 4" BLOW OFF	4	EA	$ 800.00	$ 3,200.00
4A	REMOVE EXISTING 8" BLOW OFF	2	EA	$ 2,000.00	$ 4,000.00
5A	PROTECT EXISTING 24" RECYCLED WATER PIPELINE AND MANUAL AIR RELEASE	1	LS	$ 1,500.00	$ 1,500.00
6A	REMOVE EXISTING FIRE HYDRANT	1	EA	$ 3,250.00	$ 3,250.00
7A	REMOVE EXISTING CATHODIC PROTECTION TEST STATION	21	EA	$ 800.00	$ 16,800.00
8A	REMOVE EXISTING 16" CML&C DOMESTIC WATER PIPELINE	38	LF	$ 30.00	$ 1,140.00
9A	REMOVE AND REPLACE VALVE CAN AND ADJUST TO GRADE	26	EA	$ 1,050.00	$ 27,300.00
10A	REMOVE AND REPLACE VALVE ASSEMBLY AND ADJUST TO GRADE	4	EA	$ 4,725.00	$ 18,900.00
11A	INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE	10	EA	$ 6,750.00	$ 67,500.00
12A	INSTALL NEW 4" BLOW OFF/ BOTTOM DRAIN ASSEMBLY	4	EA	$ 8,000.00	$ 32,000.00
13A	INSTALL NEW 8" BLOW OFF/ BOTTOM DRAIN ASSEMBLY	2	EA	$15,750.00	$ 31,500.00
14A	INSTALL NEW TRAFFIC RATED 2" METER BOX WITH METAL LID	1	EA	$ 525.00	$ 525.00
15A	INSTALL NEW FIRE HYDRANT ASSEMBLY	1	EA	$ 9,000.00	$ 9,000.00
16A	INSTALL NEW CATHODIC PROTECTION STATION WITH NEW WIRES TO PIPELINE	21	EA	$ 6,825.00	$ 143,325.00
17A	CONSTRUCT NEW 16" (1/4" THICK) CML&C STEEL DOMESTIC WATER PIPELINE	50	LF	$ 265.00	$ 13,250.00
18A	INSTALL NEW BRASS PLUG ON SADDLE	1	EA	$ 105.00	$ 105.00
19A	CONSTRUCT NEW 6" REINFORCED PCC PAD OVER 6" SAND	70	SF	$ 50.00	$ 3,500.00
20A	CONSTRUCT NEW B-6 CURB ONLY	12	LF	$ 30.00	$ 360.00
21A	ADJUST IRWD SEWER MANHOLE FRAME AND COVER TO GRADE	6	EA	$ 800.00	$ 4,800.00
22A	ADJUST IRWD RECYCLED WATER MANHOLE FRAME AND COVER TO GRADE	1	EA	$ 1,050.00	$ 1,050.00
23A	REMOVE EXISTING VALVE AND INSTALL BLIND FLANGE ON EXISTING TEE	2	EA	$ 800.00	$ 1,600.00
24A	ABANDON EXISTING 6" FIRE SERVICE LATERAL	1	EA	$ 1,050.00	$ 1,050.00
25A	REMOVE EXISTING CORP STOP, INSTALL PLUG, CONNECT PER W-11	5	EA	$ 800.00	$ 4,000.00
26A	INSTALL NEW VALVE AND ADJUST TO GRADE	3	EA	$ 3,750.00	$ 11,250.00
27A	REMOVE EXISTING MANUAL AIR RELEASE	2	EA	$ 800.00	$ 1,600.00
28A	REMOVE EXISTING VALVE AND INSTALL NEW FLANGED SPOOL	1	EA	$ 1,300.00	$ 1,300.00
29A	INSTALL NEW BALL CORP STOP ON EXISTING SADDLE	3	EA	$ 525.00	$ 1,575.00
				TOTAL CONSTRUCTION ESTIMATE	$ 432,580.00
				4% ADMINISTRATION FEE PER SECTION 5 OF AGREEMENT	$ 17,303.00
				TOTAL COSTS	$ 449,883.00

Funding Summary
University Drive Widening
CIP 311306

September 12, 2017

Project Expenditures	
Design Engineering	$ 2,200,000
Construction Contract – City (Engineer's Estimate)	$13,141,050
Construction Contract – IRWD (Engineer's Estimate)	$ 449,883
Street Light Installation – SCE (Engineers Estimate)	$ 500,000
Construction Engineering	$ 1,890,000
Construction Contingency	$ 1,200,000
Total Estimated Project Cost	**$19,380,933**

Project Funding	
CIP 311306 - University Drive Widening	$18,931,050
IRWD Reimbursement Funds	$ 449,883
Total Funding Available	**$19,380,933**

ATTACHMENT 3

CITY OF IRVINE

ORANGE COUNTY, CALIFORNIA

NOTICE INVITING BIDS, PROPOSAL, CONTRACT AND SPECIAL PROVISIONS FOR

UNIVERSITY DRIVE WIDENING IMPROVEMENTS

CIP 311306
BID NO. 18-1304

CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CALIFORNIA 92623-9575

PREPARED BY:
HARRIS & ASSOCIATES
22 EXECUTIVE PARK, SUITE 200
IRVINE, CA 92614

JULY 2017

ATTACHMENT 4

UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR UNDER THE DIRECTION OF:



Randall G. Berry, P.E.
Harris & Associates

R.C.E. No. 44642

APPROVED BY:

James M. Houlihan, P. E.
City Engineer

R.C.E. No. 51568

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CITY OF IRVINE, CALIFORNIA
NOTICE INVITING BIDS
Bid No. 18-1304

NOTICE IS HEREBY GIVEN that sealed bids with online bid price submittal will be received by the Purchasing Agent of the City of Irvine, California, for furnishing all labor services, materials, tools, equipment, supplies, transportation, utilities and all other items and facilities necessary therefore, as provided in the contract documents for **University Drive Widening Improvements** together with appurtenances thereto, in strict accordance with the specifications on file at the **Department of Public Works**, 6427 Oak Canyon, Bldg. 1, Irvine, California 92618-5202.

DATE OF OPENING BIDS: **Bid prices for each line item of the Schedule of work must be entered and all other required documents for the bid proposal packet (pages 12, 22-35) must be uploaded to the BidsOnline system in accordance with the instructions beginning on page 20, no later than XX:XX a.m. on Month Date, 20XX at which time bids will be publicly read aloud at 1 Civic Center Plaza, Irvine, California 92606-5207. No late bids will be accepted. No other method of bid submittal will be accepted.**

LOCATION OF THE WORK: The work to be performed hereunder is located in the City of Irvine, County of Orange, on **University Drive from MacArthur Boulevard to Campus Drive.**

DESCRIPTION OF WORK: The work to be performed shall include, but not be limited to:

Traffic control, unclassified excavation, unclassified fill, construction of PCC curb ramps, median curb, curb & gutter, sidewalk, crack sealing, uniform depth cold milling, asphalt base course, asphalt concrete surface course, adjust utility manholes and valves to grade, installation of traffic signs, striping, pavement markings, and raised pavement markers, installation of new traffic signals, traffic signal modifications, SCE coordination and installation of new street light infrastructure, storm drain installation, landscaping, irrigation system, water quality BMPs, and other items not mentioned here, but are required by the Plans and the Special Provisions. The Engineer's construction cost estimate for the project is above $13,140,000.

LICENSE REQUIREMENT: **Prime Contractor must possess a valid Class A license.** At the time of submitting the bid, the Bidder shall be licensed as a contractor in accordance with the provisions of California Business and Professions Code Chapter 9, Division 3. All traffic signal (and/or street lighting) work under this Contract shall be considered specialty in nature. Any Contractor and/or subcontractor proposing to perform this specialty work must possess a valid **Class C-10** license prior to award of contract. Persons performing the work of an electrician shall be certified in accordance with California Labor Code Section 3099. Proof of Certification shall be provided to the City prior to commencement of work.

DEBARRED CONTRACTORS: The City of Irvine Municipal Code Section 2-12-101 *et seq.* sets forth procedures to debar Contractors from bidding or performing work on City of Irvine contracts at any tier, whether prime, subcontractor, etc. Accordingly, certain Contractors have been debarred and are listed on the City's website at

www.cityofirvine.org/purchasing. Click on the link which states: “For a list of Debarred Contractors, please click here.”

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All work shall be completed in a total **Two Hundred Forty (240) Working Days** (excluding plant establishment) and **Three Hundred (300) Working Days** (including plant establishment) from the date specified in the Notice to Proceed. Liquidated damages shall be **Eight Thousand, Two Hundred Thirteen Dollars ($8,213)** per calendar day, for each and every calendar day’s delay in finishing the work, except plant establishment work, in excess of the number of working days prescribed above and liquidated damages shall be **Five Hundred Dollars ($500)** per calendar day, for each and every calendar day’s delay in completing the plant establishment work in excess of the number of working days prescribed above. In no case will liquidated damages be assessed at more than **Eight Thousand, Two Hundred Thirteen Dollars ($8,213)** per calendar day.

AWARD OF CONTRACT: The award of the Contract, if it is awarded, will be to the lowest responsive and responsible Bidder whose bid complies with all the requirements prescribed. The City reserves the right, after opening bids, to reject any or all bids, to waive any informality in a bid, to make awards in the interest of the City, and to reject all other bids.

PROPOSAL GUARANTEE AND BONDS: Each bid shall be accompanied by a scanned copy of a certified or cashier's check or corporate surety bond issued by a surety company, admitted to do business in the State of California, on the form furnished by the City as guarantee that bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure Workers’ Compensation insurance, and liability insurance, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the contract (“Performance Bond”) and for the payment of claims of materialmen and laborers thereunder (“Payment Bond”). Said check or bidder's bond shall be in an amount of not less than ten percent (10%) of the amount of the bid. **Bidders with the apparent three lowest responsive bids shall deliver an original hard copy of the certified check, cashier’s check or surety bond to the Receptionist for the Purchasing Agent at 1 Civic Center Plaza, Irvine, CA, 92606 within two business days of the bid opening date.** The Performance and Payment Bond shall be not less than one hundred percent (100%) of the total amount of the bid price named in the contract. Only bonds issued by companies admitted to do business in the State of California will be accepted in accordance with the Code of Civil Procedure Section 995.311. Failure to submit acceptable Payment and Performance Bonds as required shall result in a rejection of the bid and a forfeiture of the proposal guarantee.

PREVAILING RATES OF WAGES: **Prevailing wage requirements apply to public works projects with a value exceeding $1,000.00. The definition of “public works” is found at Labor Code Section 1720, *et seq.***

The City is subject to the provisions of law relating to public contracts in the State of California. It is agreed that all provisions of law applicable to public contracts are a part of this Agreement to the same extent as though set forth herein, and will be complied with by Contractor. Contractor shall abide by all applicable Sections of the California Labor Codes including Sections 1770 -1781, *et seq*. In accordance with the provisions of Section 1773 of the California Labor Code, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the Work is to be

performed shall be in accordance with the rates posted on the Department of Industrial Relations website, found at http://www.dir.ca.gov/dirdatabases.html. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Agreement.

The City of Irvine reminds all contractors and subcontractors of the adoption of **State of California Senate Bill No. 854 (SB 854),** and encourages them to understand and comply with the requirements as set forth on the Department of Industrial Relations (DIR) website at http://www.dir.ca.gov/Public-Works/PublicWorks.html. All contractors and subcontractors who plan to bid on a public works project (including maintenance work) with a value exceeding $1,000.00 must first be registered and pay an annual fee with the DIR. The City requires all contractors and subcontractors to be registered with the DIR prior to submitting a bid on any public works project. Subject to the exceptions set forth in Labor Code Section 1725.5, bids from contractors that are not currently registered will be deemed nonresponsive. Further, the City will not award a contract to and no contractor or subcontractor will be allowed to work on a City public works project unless they are registered with the DIR pursuant to Labor Code Section 1725.5. Please visit the DIR website for further information.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

LABOR REGULATIONS: The Contractor shall comply with all applicable requirements of the California Labor Code and the City of Irvine Municipal Code.

PLANS AND SPECIFICATIONS: A full set of bid documents consisting of Notice Inviting Bids, Proposal, Contract, Special Provisions and Contract Plans are available for inspection without charge at the Department of Public Works, Project Management Division, City of Irvine Operations Support Facility, 6427 Oak Canyon, Building 1, Irvine, California 92618-5202.

To obtain a copy of the bid documents, please visit the City of Irvine's website at www.cityofirvine.org/purchasing. Click on the "Supplier Registration and Bid Opportunities" link, and review the information about our online system. Next, click on the "BidsOnline" link. If you are not currently registered with the City of Irvine, please click on the "New Vendor Registration" button and then complete the electronic supplier registration process, including selecting Category Code(s) describing the goods and/or services you provide, as well as entering your Contractors State License information. After registering your firm, click on the "Bid Opportunities" button to view and download the Bid Documents. Interested firms must be registered on the City's website and download the Bid Documents in order to submit a bid. Firms must also check the website periodically for addenda information as failure to download any and all addenda will result in bid disqualification.

SECURITY FOR COMPLETION OF WORK: The Contract Documents establish a provision for monthly progress payments based upon the percentage of work completed as determined by the Engineer. The City will retain a portion of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amount so retained upon compliance with the requirements of California Public Contract Code § 22300 and the provisions of the contract documents, Special Provisions Subsection 9-3.2.2 pertaining to "Substitution of Securities."

PROJECT ADMINISTRATION: All questions relative to this project prior to opening bids shall be prepared in writing and transmitted to the attention of Mr. Darrell Hartman, PE, Senior Civil Engineer, by email to dhartman@cityofirvine.org with a copy to Mr. Brian Brown, Senior Buyer, bbrown@cityofirvine.org. No inquiries will be accepted later than five (5) business days prior to the bid opening date as this would not allow time to respond to all plan holders. No phone inquiries will be accepted.

CITY OF IRVINE

Published by:
Publication Date:

INSTRUCTIONS TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS

1. CONTRACT DOCUMENTS: The Contract Documents shall consist of:

   a) Permits and Agreements

   b) Contract

   c) Addenda

   d) Instructions to Bidders, Proposal Requirements and Conditions

   e) Special Provisions

   f) Contract Plans

   g) Standard Plans (City of Irvine, Caltrans, SPPWC, OCPW)

   h) Standard Specifications

   i) Reference Specifications,

   all of which are on file at the City of Irvine in the Public Works Department, Project Management Division, Operations Support Facility, 6427 Oak Canyon, Bldg. 1, Irvine, California, and are hereby referred to and made a part hereof.

2. BID PROPOSALS: To be considered, bids shall be made in accordance with the following instructions:

   a) For the convenience of bidders, the “SCHEDULE OF WORK AND BID PRICES” has been posted on the City’s BidsOnline system. Bidders must enter their unit price information online in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS included herein. Unit prices must be entered online and then the extended prices and total bid price will be automatically calculated.

   b) Bids shall be submitted only on bid items stated in the Bid Documents; bids on other bases will not be considered. Bids that are not submitted on the prescribed forms and in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS may be rejected.

   c) Unless called for, additive bids will not be considered.

   d) Pursuant to the provisions of Public Contract Code § 4101 to 4108, inclusive, every Bidder shall set forth in its bid:

      1) The Bidder shall list the name, license number and location of the place of business of each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater.

      2) The bid item numbers and the percentage of the bid item subcontracted.

e) In the event additive bids are called for and the Bidder intends to use different or additional subcontractors on the additive(s), the Bidder shall fill out additional forms of the list of subcontractors and shall identify such forms with relation to whether they apply to the base or additive bids.

f) If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2%) of the Bidder's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the Bidder's total bid or ten thousand dollars ($10,000), whichever is greater, the Bidder agrees to perform that portion of work himself. The successful Bidder shall not, without the consent of the City, either:

   1) Substitute any person, firm or corporation as subcontractor in place of the subcontractor designated in the original bid, or

   2) Permit any subcontract to be assigned or transferred or allow the work to be performed by anyone other than the original subcontractor listed in the bid.

g) If required in the Notice Inviting Bids, bids shall be accompanied by a certified or cashier's check or an acceptable corporate bid bond on the form furnished by the City for an amount not less than ten percent (10%) of the bid, made payable to the order of the City of Irvine. The check or bid bond shall be a guarantee that the Bidder will enter into a contract and provide all required insurance and bonds if awarded the work; and in case of refusal or failure to enter into the contract, the check or bid bond shall be forfeited. The City will return Bidder's check if the project is not awarded to Bidder.

   Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090.

h) Before submitting a bid, bidders shall carefully examine the work site, the Contract Documents and the form of Contract and shall fully inform themselves about all existing conditions and limitations. Bidders shall include in their bids a sum to cover the cost of all work included in the Contract.

i) Bid prices must be entered and the bid proposal packet must be uploaded to the Bids Online System on or before the day and hour set for the bid opening in the Notice Inviting Bids. No other method of bid submittal will be accepted. Bidders with the three apparent lowest responsive bids shall deliver an original hard copy of the certified check, cashier's check or surety bond to the Receptionist for the Purchasing Agent at 1 Civic Center Plaza, Irvine, CA, 92606 within two business days of the bid opening date.

j) A bid may be considered non-responsive if it does not comply with the requirements set forth in these bid documents. A responsive bid is one that complies with the solicitation in all acceptability and material respects and contains no material defects.

3. WITHDRAWAL OF BIDS: Bids may be withdrawn at any time before the bid deadline, by going back into the BidsOnline system and selecting "withdraw."

4. INTERPRETATION OF DRAWINGS AND DOCUMENTS; REQUESTS FOR CLARIFICATION: If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the plans and specifications, or other proposed Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he shall submit to the Purchasing Agent a written request for all interpretations or corrections thereof via email to the project manager and purchasing staff prior to the deadline for submitting questions, as set forth in the Notice Inviting Bids section herein. Any clarification or correction of the proposed documents will be made only by Addendum duly issued, with notice provided to all firms who downloaded the bid documents from the City's website. The City is not responsible for any other explanations or interpretations of the proposed documents.

5. ADDENDA TO THE CONTRACT DOCUMENTS: Any addenda issued during the time of bidding, or forming a part of the Contract Documents after the Bidder has downloaded the bid documents from the City's website, shall be taken into account in the bid and shall be made a part of the Contract.

   Addenda may be issued by the City of Irvine for any reason, including but not limited to, clarifying or correcting the Notice Inviting Bids, Special Provisions, Plans, or Bid.

   Bidders will be notified of such Addenda during the period of advertising either by email or posting on the City's website, provided however, each Bidder shall be solely responsible for obtaining any such Addenda.

   The Bidder shall acknowledge the receipt of Addenda on the City's BidsOnline system.

6. BIDDER RESPONSIVENESS: Failure of the Bidder to provide requested information in a complete and accurate manner may be considered non-responsive resulting in rejection of the bid. The use of "N/A" or "n/a" in response to any request for information without an explanation as to why that abbreviation is being used may render the bid non-responsive.

7. BIDDER RESPONSIBILITY: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Contractor is non-responsible if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any other entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; or (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider Bidder's past conduct on City projects or on any other public or private projects upon which Bidder performed work.

8. BIDDER DEBARMENT: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Bidder shall be debarred if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider past conduct of the Contractor on City projects or on any other public or private projects which Contractor performed work.

9. OPENING BIDS: Bids will be publicly opened and read at the time and place set in the Notice Inviting Bids.

10. BID PROTEST PROCEDURES:

    a) BASIS FOR PROTEST: It is the policy of the City to ensure that free and open competition takes place in all procurement activities. If, in the course of a procurement action, an interested party has reason to believe that these conditions do not exist, the interested party may file a protest in accordance with the provisions of these procedures with the City of Irvine Purchasing Agent requesting a review of the claim and a timely resolution of the issue. Any bidder on a project for which it submitted a timely bid may protest the contract award for that project; however, subcontractors, suppliers or other third parties may not protest contract awards. Moreover, complaints about alleged ambiguity of the bid documents and/or estimates are not appropriate subject matters for bid protests.

    b) BID PROTEST CONTENTS: The bid protest shall be submitted in writing via email to the attention of the Purchasing Agent. The written protest shall include:

        1) The solicitation number and project description.

        2) The name, address, phone number, and email address of the protesting party.

        3) A detailed statement of all the legal and factual grounds for the protest and all relevant, supporting documentation (including all written documentation). The grounds for protest must be fully supported.

        4) Statement of the form of relief requested from the City.

        5) Signature of an authorized representative of the protesting party.

    c) DEADLINE TO SUBMIT BID PROTESTS: Bid protests must be filed within five (5) business days after the deadline for receiving bids.

d) WHERE TO FILE: All protests are to be directed to the City of Irvine Purchasing Agent. Protests must be submitted in writing via email to: purchasing@cityofirvine.org. A copy of the email must also be sent to the project manager whose email address is set forth in the bid documents. (A document is considered filed on a particular calendar day when it is received via email by the City of Irvine Purchasing Agent by 5:00 p.m., Pacific Standard Time, on that calendar day.) Although not required, in addition to submitting a protest via email, an original protest letter may be sent via United States Postal Service to: Attn: Purchasing Agent, City of Irvine, P.O. Box 19575, Irvine, CA 92623-9575.

e) BID PROTEST REVIEW: Upon receipt, the Purchasing Agent shall consider the protest and may give notice of the protest and its basis to other persons including bidders involved in or affected by the protest. A protest shall be dismissed for failure to comply with any of the requirements set forth in the "Bid Protest Contents" section above. The Purchasing Agent shall review all material submitted with the protest. No additional material will be accepted for consideration from the protesting party unless specifically requested by the Purchasing Agent. If additional material is requested, it must be submitted by the requested date. The Purchasing Agent shall respond to the protesting party via email within ten (10) business days after receipt of the protest. Final determinations shall be binding, except as otherwise provided below.

f) RECONSIDERATION OF PROTEST DECISION: A protesting party may request the Purchasing Agent's reconsideration of a decision prior to contract award only if one or both of the following conditions are met:

   1) New information becomes available that was not previously known, or could not have been reasonably known, at the time of the original protest; and/or

   2) The Purchasing Agent's decision contains an error of law.

   Any request for reconsideration of a protest decision must be submitted in writing via email to the Purchasing Agent within three (3) business days from the date of issuance of the initial decision. The request must include a detailed explanation of the basis for reconsideration as set forth above. The Purchasing Agent shall respond to the request for reconsideration within seven (7) business days from receipt of the request.

g) CONTRACT AWARD: At its discretion, the City may delay the execution of any proposed agreement pending the resolution of a protest unless one or both of the following conditions are present:

   1) The project or service being procured is urgently required; and/or

   2) Failure to make prompt award will otherwise cause undue harm to the City.

h) REMEDIES: There shall be no limitation on remedies selected by the City. Nothing contained herein shall be considered to either act as a limitation on the City's choice of remedies or confer any right upon any interested party to a remedy. In determining the appropriate remedy, the City shall consider all the circumstances surrounding the solicitation, the contract

selection, and/or the contract award, including, but not limited to: the seriousness of any deficiency found to exist in the contracting process; the effect of the action of the competitive process; any urgency surrounding the contract requirement; and the effect that implementing the remedy will have on the City's overall ability to accomplish its mission. If the City determines that the award or proposed award was not made in accordance with the applicable City statutes, regulations, policies, and procedures, the City may, in its sole discretion, grant any of the following or any other remedy it deems appropriate: If pre-award, reject all bids and issue a new solicitation, make a new contractor selection or award a contract consistent with applicable statutes, regulations, policies, and procedures; or if post-award, refrain from extending the term of the contract or awarding task orders under an existing task order agreement; or at its sole discretion, take no further action.

11. AWARD OR REJECTION OF BIDS AND EXECUTION OF CONTRACT: The award of the Contract will be as of the date specified in the Notice of Award issued by the City. The award of the Contract shall not constitute a binding obligation on City until the Contract has been lawfully executed by all parties and the Contractor has submitted all required insurance certificates and bonds to the City.

    The Contractor shall not commence work in advance of the execution of the Contract, the delivery of the bonds and insurance certificates, as specified above and purchase order issuance.

    The award of the Contract, if it is awarded, will be to the responsive and responsible Bidder who submitted the lowest Bid complying with these Proposal Requirements and Conditions and with the Notice Inviting Bids. Such award, if made, will be made within ninety (90) Calendar Days after the opening of the proposals. The ninety (90) Calendar Days period shall be subject to extension for such further period as may be agreed upon in writing between the City and the Bidder(s) concerned. All bids will be compiled on the basis of the estimated quantities of work to be done as shown in the Proposal. However until an award is made, the City of Irvine reserves the right to reject any and all bids or to waive any informality in bids received, if doing so is deemed to best serve the interest of the City.

12. CONTRACT AND BONDS: The Contract, which the successful Bidder, as Contractor, will be required to execute, is included in the Contract Documents and should be carefully examined by the Bidder.

    The successful Bidder, simultaneously with his execution of the Contract will be required to furnish a Payment Bond and a Performance Bond. Said bonds shall be in the form of the two (2) sample bonds included in these Contract Documents and based upon conditions specified in the Standard Specifications Section 2-4, "Contract Bonds," and as specified in the Special Provisions and shall be secured from a surety company satisfactory to the City.

    Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and

Insurance Code § 12090. Failure to submit acceptable Payment and Performance Bonds as required shall result in rejection of bid and forfeiture of the proposal guarantee.

All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents will be made without securing the consent of the surety or sureties on the Contract bonds.

The Contract shall be signed by the successful Bidder, and delivered to the City together with the Contract bonds within ten (10) days of the date specified in the Notice of Award issued by the City, not including Saturdays, Sundays and legal holidays. The Contractor shall submit insurance certificates electronically in accordance with 7-3 of the Standard Specifications and as set forth in the Contract Documents. The executed Contract, together with the required bonds, will be filed with the Clerk of the City of Irvine.

Failure of the lowest responsive and responsible Bidder to execute the Contract and file acceptable insurance certificates and bonds as provided herein within ten (10) days of award of the Contract, not including Saturdays, Sundays and legal holidays, shall be just cause for the forfeiture of the bid bond. The successful Bidder may file with the City a written notice, signed by the Bidder or his authorized representative, specifying that the Bidder will refuse to execute the Contract if presented to him. The filing of such notice shall have the same force and effect as the failure of the Bidder to execute the Contract and furnish acceptable certificates of insurance and bonds within the time herein before prescribed.

13. SPECIAL NOTICE: Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the Work will be performed, and the Contractor must employ, so far as possible, such methods and means in the carrying out of this work as will not cause any interruption or interference with any other contractor.

14. BIDDERS INTERESTED IN MORE THAN ONE BID: No person, firm or corporation shall be allowed to make or file or be interested in more than one bid as prime contractor for the same work.

15. BIDS TO BE LEFT ON DEPOSIT: No Bidder may withdraw its bid for a period of ninety (90) Calendar Days after the time set for opening thereof. However, the City will return all certified checks within fifteen (15) days, not including Saturdays, Sundays and legal holidays, after the award of the Contract or rejection of the bids, as the case may be, to respective Bidders whose bids are not accepted.

16. NON-COLLUSION DECLARATION: All Bidders shall submit with their bids an executed non-collusion declaration on the form provided in the bidding documents. Failure to provide completed form shall result in the bid being deemed non-responsive.

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is 800-424-9071. The service is

available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

17. SUBSTITUTIONS: Where the Specifications or drawings specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and a Bidder wishes to propose the use of another item as being equal, he shall request approval therefor as set forth in 4-1.6 of the Standard Specifications and Special Provisions.

18. REPORTING SUSPECTED IMPROPRIETY, GROSS WASTE, FRAUD AND OTHER ACTS: Any City and/or Great Park official, employee, and/or contractor who suspects any type of impropriety relating to purchasing or contracting activities, or gross waste, fraud, or abuse of City and/or Great Park funds or resources, a gross abuse of authority, a specified and substantial danger to public health or safety due to any act or omission of any City and/or Great Park official, employee, or contractor, or the use of a City and/or Great Park office or position or of City and/or Great Park resources for personal gain, should report the act by calling the City's Integrity Line at 866-428-1509. All such reports shall remain anonymous if desired by the reporting party. Suspected fraudulent activities include bid rigging, product substitution, theft, overcharging, false certifications and representations, and the like. Any allegations of bribery, kickbacks, gratuities, and conflicts of interest involving City employees should also be reported.

19. ASSIGNMENT OF CONTRACT: No assignment by the Contractor of any Contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the City unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment in writing.

20. OTHER REQUIREMENTS: Before entering into a Contract, the Bidder to whom the Contract has been awarded shall satisfy all insurance requirements per Section 7-3 of the Standard Specifications and Special Provisions and such insurance shall be maintained in full force and effect at its own expense during the life of this Contract.

    Upon request, the successful Bidder shall furnish to the City a statement of its financial condition and previous construction experience or such other evidence of his qualifications.

21. LABOR CODE:

    PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM

    In accordance with State of California Senate Bill No. 854 (SB 854), contractors bidding on and/or engaging in the performance of public works projects (the definition of "public works" is found at Labor Code Section 1720, *et seq.*) shall be registered with the Department of Industrial Relations. By submitting a bid for City of Irvine Public Works project, the contractor acknowledges the above

requirements and agrees to maintain a valid Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
b) Pursuant to Labor Code Section 1771.4, all bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

In addition to the requirement for submittal of certified payroll records to the City, contractors and subcontractors shall furnish electronic certified payroll records to the Labor Commissioner **(State of California, Division of Labor Standards Enforcement).**

Contractors and subcontractors shall be responsible for complying and staying current with all DIR requirements and regulations. More information on SB 854 can be found at http://www.dir.ca.gov/Public-Works/SB854.html

Attention is directed to Labor Code § 1735 which reads as follows:

> No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in the Government Code §12940, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter.

The Contractor shall abide by the provisions of the California Labor Code § 1770-1781, *et seq*. In accordance with the provisions of the California Labor Code § 1773, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the work is to be performed has been obtained from the Director of the Department of Industrial Relations, a copy of which is on file in the office of the City Clerk of the City of Irvine and will be made available to any interested party upon request. The Contractor shall post a copy of the prevailing rate of per diem wages at the job site. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of the contract.

Failure to comply with the subject sections will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1775.

In accordance with of the Labor Code § 1773.1, the Contractor must make travel and subsistence payments to each worker employed in the execution of the Contract.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract.

The Contractor shall familiarize itself with the provisions of the Labor Code § 1777.5 regarding employment of apprentices, and shall be responsible for compliance therewith, including compliance by his subcontractors.

The Contractor and subcontractors shall comply with Labor Code § 1777.6 which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age except as provided in Labor Code § 3077, of such employee.

The Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

22. RESERVATION OF RIGHTS:

The City reserves the right to:

a) Disqualify any Bidder in accordance with the instructions herein.

b) Reject any bids, at its discretion, including bids found to be conditional or incomplete, contain irregularities contain any interlineations or alterations, or found to be not responsive to this Invitation for Bids (IFB).

c) Investigate the qualifications of any Bidder under consideration.

d) Require confirmation or clarification of information furnished by the Bidder.

e) Require additional evidence of Bidder’s ability to perform the Work described in these bid documents.

f) Contact the submitted references to confirm information provided in the bid.

g) Postpone or cancel the entire IFB or a portion thereof.

h) Postpone the bid opening or award for its own convenience.

i) Award a Contract in part or in combination of items.

j) Issue subsequent IFB.

k) Seek the assistance of outside technical experts to review the bids.

l) Disqualify a bid upon evidence of collusion, with intent to defraud, or other illegal practices on the part of the Bidder.

m) Waive any errors or informalities in any bid to the extent permitted by law.

n) Require bidder to provide proof as to the equality, substitutability, and compatibility of any items proposed as alternates or equals.

o) Determine, at the City's sole discretion, the equality, substitutability, and compatibility of any items proposed as alternates or equals.

p) Exercise any other rights under the City's charter or municipal code.

The City has no obligation to consider any bid unless it is responsive to this IFB and conforming in all respects to the Form of Contract. This IFB does not commit the City to enter into a Contract.

23. Construction contractors are encouraged to allocate the local sales and use tax derived from construction contracts of Five Million Dollars ($5,000,000) or more directly to the local jurisdiction where the jobsite is located. This qualifying Contract Price applies to each contract or subcontract for work performed at the jobsite. The allocation is accomplished by obtaining a sub-permit of the seller's permit for a specific jobsite. To obtain the sub-permit, please contact the Irvine office of the State Board of Equalization located at 16715 Von Karman Avenue, Suite 200, Irvine, California 92606, phone 949-440-3473, fax 949-440-3482. Further information is available on the following website: www.boe.ca.gov, and in the attached State Board of Equalization Compliance Policy and Procedures Manual Section 260.020, Regulations 1802 and 1806 (Appendix H).

BIDDER'S PROPOSAL
CONSTRUCTION
OF
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306
BID NO. 18-1304

HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL
CITY HALL
IRVINE, CALIFORNIA

THE UNDERSIGNED, HAVING CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS; PERMITS ISSUED BY JURISDICTIONAL REGULATORY AGENCIES; CONTRACT; CONTRACT ADDENDA; INSTRUCTIONS TO BIDDERS; PROPOSAL REQUIREMENTS AND CONDITIONS; SPECIAL PROVISIONS; THE PLANS (SHEETS 1 THROUGH 87); STANDARD PLANS; STANDARD SPECIFICATIONS; REFERENCE SPECIFICATIONS; AND ALL OTHER INFORMATION PROVIDED BY THE AGENCY FOR THE CONSTRUCTION LISTED ABOVE IN AND FOR THE CITY OF IRVINE, IS FAMILIAR WITH THE CONDITIONS, HAVING PERSONALLY VISITED THE SITE OF THE WORK, AND HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND ALL INCIDENTAL WORK NECESSARY TO DELIVER ALL THE IMPROVEMENTS COMPLETE, IN PLACE AND IN STRICT CONFORMITY WITH THE CONTRACT DOCUMENTS, FOR THE UNIT PRICES NAMED IN THE FOLLOWING SCHEDULE OF WORK AND BID PRICES.

_____
Bidder's Company Name (please print or type)

_____
Signature of Bidder

_____
Print Name

CITY OF IRVINE
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306
BID NO. 18-1304

SCHEDULE OF WORK

All applicable sales taxes, State and/or Federal taxes, and any other special taxes, patent rights or royalties are included in the prices quoted in this Proposal.

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
1	MOBILIZATION	LS	1
2	CLEARING AND GRUBBING	AC	20
3	TRAFFIC CONTROL	LS	1
4	TEMPORARY CONCRETE BARRIER (K-RAIL)	LF	16,500
5	SAND FILLED CRASH CUSHIONS	EA	80
6	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1
7	ROADWAY EXCAVATION	CY	16,930
8	UNCLASSIFIED EXCAVATION	CY	13,000
9	UNCLASSIFIED FILL	CY	1,500
10	REMOVE CONCRETE CURB AND GUTTER	LF	1,150
11	REMOVE AND CONSTRUCT DEPRESSED CONCRETE CURB AND GUTTER	LF	20
12	REMOVE CONCRETE MEDIAN CURB	LF	9,950
13	REMOVE CONCRETE CURB RAMP	EA	9
14	REMOVE CONCRETE SIDEWALK	SF	2,500
15	REMOVE AC DIKE	LF	1,160
16	CONSTRUCT CONCRETE CURB AND GUTTER	LF	9,900
17	CONSTRUCT CONCRETE MEDIAN CURB	LF	10,470
18	CONSTRUCT CONCRETE MOW CURB	LF	20
19	CONSTRUCT CONCRETE DRIVEWAY	SF	1,290
20	CONSTRUCT CONCRETE SIDEWALK	SF	23,900
21	CONSTRUCT CONCRETE CURB RAMP	EA	9
22	CONSTRUCT 4" CONCRETE MEDIAN PAVEMENT OVER MINIMUM 4" SAND	SF	1,500
23	COLD MILL AC PAVEMENT	SF	129,110
24	CLASS 2 AGGREGATE BASE	CY	18,175
25	0.40' AC BASE COURSE	TON	11,310
26	AC LEVELING COURSE	TON	1,720
27	0.20' ASPHALT RUBBER HOT MIX (ARHM) SURFACE COURSE	TON	7,920
28	0.33' AC SURFACE COURSE (TEMP. MEDIAN PAVEMENT FOR STAGE CONSTRUCTION AND TRAIL)	TON	1,300
29	TYPE II SLURRY SEAL	SF	26,414

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
30	OPEN TRENCH SHEETING, SHORING, BRACING AND STEEL PLATING	LS	1
31	REMOVE 18" CMP	LF	57
32	REMOVE 30" CMP	LF	95
33	REMOVE 60" CMP	LF	351
34	RECONSTRUCT EXISTING LOCAL DEPRESSION	EA	2
35	REMOVE EXISTING CATCH BASIN (W=3')	EA	1
36	REMOVE EXISTING CATCH BASIN (W=7')	EA	2
37	REMOVE EXISTING CATCH BASIN (W=21')	EA	2
38	REMOVE EXISTING IMPACT BASIN WITH VERTICAL BAFFLE WALL	EA	1
39	REMOVE EXISTING CSP DROP INLET	EA	2
40	REMOVE EXISTING CONCRETE DRAINAGE INLET	EA	1
41	CONSTRUCT 18" RCP (2000-D)	LF	634
42	CONSTRUCT 30" RCP (2000-D)	LF	1,100
43	CONSTRUCT 60" RCP (2000-D)	LF	351
44	CONSTRUCT DOUBLE 3'Wx1'H RCB	LF	12
45	CONSTRUCT JUNCTION STRUCTURE NO. I	EA	9
46	CONSTRUCT JUNCTION STRUCTURE (PIPE TO RCB) PER SPPWC 333-2	EA	3
47	CONSTRUCT CATCH BASIN TYPE I (W=3.5'), INCLUDING LOCAL DEPRESSION	EA	8
48	CONSTRUCT CATCH BASIN TYPE II (W=7'), INCLUDING LOCAL DEPRESSION	EA	4
49	CONSTRUCT CATCH BASIN TYPE II (W=21'), INCLUDING LOCAL DEPRESSION	EA	1
50	CONSTRUCT MODIFIED CATCH BASIN TYPE I,	EA	1
51	CONSTRUCT PARKWAY DRAIN	EA	3
52	CONSTRUCT V DITCH TO "U" GUTTER TRANSITION	EA	1
53	CONSTRUCT RCB TO PIPE TRANSITION STRUCTURE	LF	20
54	CONSTRUCT MODIFIED JUNCTION STRUCTURE NO. I	EA	1
55	ENLARGE OPENING OF EXISTING STORM DRAIN STRUCTURE	EA	3
56	CONSTRUCT CONCRETE COLLAR (18")	EA	5
57	CONSTRUCT CONCRETE COLLAR (30")	EA	4
58	CONSTRUCT CONCRETE COLLAR (60")	EA	6
59	CONSTRUCT BLANKET PROTECTION	EA	8
60	INSTALL FILTERRA UNIT (12'Lx4'W), INCLUDING LOCAL DEPRESSION	EA	1
61	INSTALL FILTERRA UNIT (6'Lx4'W), INCLUDING LOCAL	EA	2

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
	DEPRESSION		
62	INSTALL FILTERRA UNIT (6'Lx3'W), INCLUDING LOCAL DEPRESSION	EA	2
63	INSTALL FILTERRA UNIT (4'Lx4'W), INCLUDING LOCAL DEPRESSION	EA	12
64	INSTALL FILTERRA UNIT (16'Lx3'W), INCLUDING LOCAL DEPRESSION	EA	1
65	CONSTRUCT 4" PVC (SCH 40)	LF	180
66	CONSTRUCT 2' THICK CONCRETE PLUG	EA	1
67	CONSTRUCT CALTRANS TYPE 1 (CASE 2) CONCRETE RETAINING WALL	SF	7,623
68	CONSTRUCT CONCRETE RETAINING CURB WALL	LF	740
69	INSTALL CABLE RAILING	LF	891
70	CONSTRUCT CONCRETE RETAINING WALL GUTTER	LF	891
71	CONSTRUCT WALL DRAIN WITH PIPE DOME AND WALL GUTTER OUTLET WITH 4" PVC	EA	4
72	CONSTRUCT CALTRANS TYPE 6A (CASE 1) CMU RETAINING WALL (H=3'-4")	SF	284
73	CMU WALL CANTILEVER FOUNDATION (BIKE TRAIL)	CY	10
74	INSTALL DETECTABLE WARNING SURFACE (RETROFIT ONLY)	SF	40
75	CONSTRUCT METAL HAND RAIL ON TOP OF CMU WALL	LF	85
76	CONSTRUCT 5' HIGH METAL CHAIN LINK FENCE	LF	38
77	CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING	CY	52
78	INSTALL BOLLARD	EA	16
79	INSTALL METAL BEAM GUARD RAILING (MBGR) ON METAL POSTS	LF	148
80	INSTALL PEDESTRIAN BARRICADE	EA	2
81	CONSTRUCT CALTRANS TYPE 5 (CASE 1) CONCRETE RETAINING WALL	SF	120
82	FINE GRADING (SLOPE GRADING - NON RETAINING WALL)	SF	11,750
83	CLEAR AND GRUB (FOR LANDSCAPING AND IRRIGATION IMPROVEMENTS)	SF	83,282
84	TREE REMOVAL	EA	157
85	SOIL PREPARATION / FINE GRADING	SF	83,282
86	EXCAVATION AND REMOVAL OF SPOILS FOR DECOMPOSED GRANITE PAVING	CY	20
87	4" STABILIZED DECOMPOSED GRANITE	CY	20

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
88	INSTALL ROTOR HEADS	EA	39
89	INSTALL TREE SUPPLEMENTAL SPRAY HEADS	EA	206
90	INSTALL LANDSCAPE DRIPLINE WITH APPURTENANCES	SF	82,413
91	INSTALL DRIP REMOTE CONTROL VALVES	EA	34
92	INSTALL REMOTE CONTROL VALVES	EA	10
93	RELOCATE EXISTING REMOTE CONTROL VALVES	EA	23
94	RELOCATE EXISTING HOA CONTROLLER	LS	1
95	MODIFY MISCELLANEOUS EXISTING UCI IRRIGATION HEADS	LS	1
96	INSTALL QUICK COUPLING VALVES	EA	70
97	INSTALL LINE SIZE GATE VALVES	EA	22
98	INSTALL FLOW SENSOR	EA	2
99	INSTALL BASKET STRAINER AND MASTER VALVE ASSEMBLY	EA	3
100	INSTALL FERTILIZER INJECTOR	EA	2
101	INSTALL IRRIGATION CABINET/CONTROLLER ASSEMBLY (INCLUDES DEMO OF EXISTING CABINET/CONTROLLER)	EA	3
102	REMOVE EXISTING 1 1/2" WATER METER	EA	1
103	INSTALL NEW 1 1/2" WATER METER	EA	2
104	INSTALL SCH 40 PVC NON-PRESSURE LATERAL LINE	LF	5,530
105	INSTALL CL 315 PVC PRESSURE MAIN LINE PIPE	LF	11,376
106	INSTALL SCH 40 PVC SLEEVES (4”)	LF	1,211
107	INSTALL CONTROL WIRE	LF	38,000
108	INSTALL ROOT BARRIER	LF	490
109	INSTALL TUFFY™ POTS SHRUBS AND GROUNDCOVER OR APPROVED EQUAL	EA	6,571
110	INSTALL 1 GAL. SHRUBS AND GROUNDCOVER	EA	21,788
111	INSTALL 5 GAL. SHRUBS	EA	1,117
112	INSTALL 15 GAL. SUCCULENT	EA	19
113	INSTALL 24" BOX TREE	EA	116
114	SODDED TURF (REPAIR)	SF	7,579
115	REPLANT DAMAGED HONEYSUCKLE/VINCA/ CARPOBROTUS	SF	3,993
116	INSTALL 2" MULCH BED	CY	519
117	PLANT ESTABLISHMENT AND MAINTENANCE (90 WORKING DAYS)	LS	1
118	RELOCATE EXISTING HOA AND CITY METER	LS	2
119	STREET LIGHTING	LS	1

CITY OF IRVINE
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306
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BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
120	TRAFFIC SIGNAL AT UNIVERSITY /CALIFORNIA	LS	1
121	TRAFFIC SIGNAL AT UNIVERSITY /CAMPUS	LS	1
122	TRAFFIC SIGNAL AT UNIVERSITY /MACARTHUR BLVD NORTH RAMPS	LS	1
123	TRAFFIC SIGNAL AT UNIVERSITY/MESA	LS	1
124	TRAFFIC SIGNAL INTERCONNECT	LS	1
125	TEMPORARY TRAFFIC SIGNAL	LS	1
126	TEMPORARY STREET LIGHTING	LS	1
127	STRIPING, MARKINGS AND MARKERS	LS	1
128	INSTALL SIGN	EA	6
129	RELOCATE SIGN (1 POST)	EA	40
130	RELOCATE UTILITY MARKER	EA	26
131	RELOCATE SIGN (COI)	EA	1
132	REMOVE SIGN	EA	4
133	REMOVE EXISTING DOUBLE YELLOW PAINTED STRIPE	LS	1
134	REMOVE 8’ X 12’ OUTDOOR LOCATION SIGNS INCLUDING POSTS AND FOOTINGS	EA	4

CITY OF IRVINE
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
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ADDITIVE BID ITEM

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
1A	EXCAVATION/ TRENCH SAFETY MEASURES	LS	1
2A	REMOVE EXISTING AIR-VACUUM VALVE ASSEMBLY	EA	9
3A	REMOVE EXISTING 4” BLOW OFF	EA	4
4A	REMOVE EXISTING 8” BLOW OFF	EA	2
5A	PROTECT EXISTING 24” RECYCLED WATER PIPELINE AND MANUAL AIR RELEASE	LS	1
6A	REMOVE EXISTING FIRE HYDRANT	EA	1
7A	REMOVE EXISTING CATHODIC PROTECTION TEST STATION	EA	21
8A	REMOVE EXISTING 16” CML&C DOMESTIC WATER PIPELINE	LF	38
9A	REMOVE AND REPLACE VALVE CAN AND ADJUST TO GRADE	EA	26
10A	REMOVE AND REPLACE VALVE ASSEMBLY AND ADJUST TO GRADE	EA	4
11A	INSTALL NEW 2” AIR RELEASE AND VACUUM VALVE	EA	10
12A	INSTALL NEW 4” BLOW OFF/ BOTTOM DRAIN ASSEMBLY	EA	4
13A	INSTALL NEW 8” BLOW OFF/ BOTTOM DRAIN ASSEMBLY	EA	2
14A	INSTALL NEW TRAFFIC RATED 2” METER BOX WITH METAL LID	EA	1
15A	INSTALL NEW FIRE HYDRANT ASSEMBLY	EA	1
16A	INSTALL NEW CATHODIC PROTECTION STATION WITH NEW WIRES TO PIPELINE	EA	21
17A	CONSTRUCT NEW 16” (1/4” THICK) CML&C STEEL DOMESTIC WATER PIPELINE	LF	50
18A	INSTALL NEW BRASS PLUG ON SADDLE	EA	1
19A	CONSTRUCT NEW 6” REINFORCED PCC PAD OVER 6” SAND	SF	70
20A	CONSTRUCT NEW B-6 CURB ONLY	LF	12
21A	ADJUST IRWD SEWER MANHOLE FRAME AND COVER TO GRADE	EA	6
22A	ADJUST IRWD RECYCLED WATER MANHOLE FRAME AND COVER TO GRADE	EA	1
23A	REMOVE EXISTING VALVE AND INSTALL BLIND FLANGE ON EXISTING TEE	EA	2
24A	ABANDON EXISTING 6” FIRE SERVICE LATERAL	EA	1
25A	REMOVE EXISTING CORP STOP, INSTALL PLUG,	EA	5

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	EST. QTY
	CONNECT PER W-11		
26A	INSTALL NEW VALVE AND ADJUST TO GRADE	EA	3
27A	REMOVE EXISTING MANUAL AIR RELEASE	EA	2
28A	REMOVE EXISTING VALVE AND INSTALL NEW FLANGED SPOOL	EA	1
29A	INSTALL NEW BALL CORP STOP ON EXISTING SADDLE	EA	3

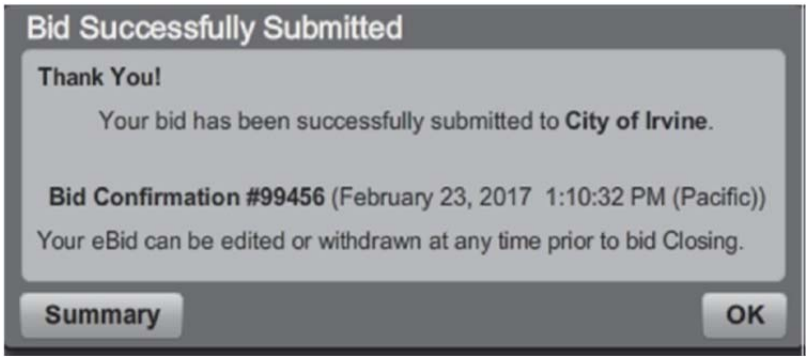
<u>NOTE:</u> FOR ADDITIVE ALTERNATE BID SCHEDULE ITEM INFORMATION, PLEASE REFER TO APPENDIX I & II FOR BASIS OF MEASUREMENT FOR PAYMENT, GENERAL DESIGN REQUIREMENTS, BID ITEM DESCRIPTIONS, AND REFERENCE TO PERTINENT SECTIONS OF THE IRWD CONSTRUCTION MANUAL FOR TECHNICAL SPECIFICATIONS.

CITY OF IRVINE
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306
BID NO. 18-1304

INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS

In order to access the BidsOnline system and ensure successful online submission of your bid prices, follow these steps:

1. Go to https://www.planetbids.com/portal/portal.cfm?CompanyID=15927#
2. On the Vendor Portal page, log into the system (lower right hand corner of screen) with your assigned user name and password. (You must be registered in order to download documents and submit a bid.)
3. Click on "Bid Opportunities" and then on the Bid # and Description that you wish to bid on. The selected bid will open to allow you to access all tabs, documents and the pricing sheet.
4. Click on the “Documents & Attachment” tab to be sure you have downloaded all documents that are part of this bid.
   - *If you have not already downloaded all bid documents, you must download them now, in order to submit your bid. The screen will indicate which documents you've already downloaded.*
5. Click on the tab "Addenda & Emails" to be sure you have read and acknowledged all addenda that have been issued for this bid.
   - *The screen will display "yes" or "no" next to each addendum to indicate whether you have viewed and acknowledged it. If you have not previously acknowledged an addendum, do so now by clicking on the addendum to open and read it, then click on the "Acknowledge" button on the lower left hand corner of screen.*
6. To begin entering your bid, click on "Place eBid" on the lower right corner of the screen. The bid "Terms and Conditions" will pop up with a button for you to click "Accept" to acknowledge your agreement to the terms of the bid.
7. Enter the Respondee information on the “Detail” tab.
8. Click the “Attach” button on the “Attachments” tab, browse to your scanned Bid Submittal Documents, and upload them.
9. Go to the "Line Items" tab and enter your unit prices on each line. The system will calculate the extended costs and grand total for you.
10. When you have finished entering all pricing and attachments, click on the "Save" button. This saves your bid as a draft for you to review or revise as needed anytime up to the bid submittal deadline. When you are ready to submit your bid, click the "Submit" button. You will receive a confirming message that looks like this:



Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. As noted in the screen print above, if you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

Please begin entering your bid in sufficient time to complete and submit it prior to the stated deadline. The official closing time for the bid is determined, and controlled, by the electronic clock in the bid management system. Once the deadline is reached, the system will not allow any bids to be submitted, and any in process that are not completed will be rejected. The amount of time required to enter and submit your bid depends on the complexity of the bid and the processing speed of your server and internet connections.

Technical Support
In the event you encounter technical difficulties during the uploading process, please contact the Planet Bids, BidsOnline system team as shown below (M-F from 8 am to 5 pm):

support@planetbids.com or call 818-992-1771, ext. 0

Bid prices must be entered and the bid proposal packet must be uploaded to the BidsOnline system no later than the date and time indicated on the Notice Inviting Bids. No late bids will be accepted. No other method of bid submittal will be accepted.

CITY OF IRVINE
UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306
BID NO. 18-1304

INFORMATION REQUIRED OF BIDDERS

In determining the lowest "responsible" bidder, consideration will be given to the general competency of the bidder in regard to the work covered by the Bid Proposal. To this end, each proposal shall be supported by a statement of the Bidder's experience on this form. **Failure of the Bidder to provide requested information in a complete and accurate manner shall render the bid non-responsive**. Additionally, the City reserves the right to disqualify or refuse to consider a proposal if a Bidder is determined to be non-responsible in accordance with Irvine Municipal Code § 2-12-103 "Determination of Contractor Non-Responsibility."

The Bidder shall supply the following information. Use additional sheets as necessary.

1. Contact person name:_____ Email:_____

   Address: _____

   Telephone: (___)_____Fax: (___)_____
2. Type of firm (Individual, Partnership, or Corporation): _____
3. State Contractor's License Number and Classification:_____
4. DIR Registration Number: _____ Expiration Date_____
5. Number of years your firm has operated as a contractor: _____
6. Number of years your firm operated under its present business name: _____
7. List the **names and addresses** of all principals or officers authorized to bind your firm.

Name:	**Address:**

8. List any project(s) your firm has **failed to complete** within the last five years due to a termination of contract. For each project, list the type of project, client's name, contact person, current telephone number, email address, and provide a brief description of the grounds for the termination.

   Check appropriate box: None ☐ See list below ☐

Bidder's Name: _____

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

9. List projects of similar nature to the UNIVERSITY DRIVE WIDENING IMPROVEMENTS your firm is **currently** constructing. For each project, list the type of project, contract amount, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Bidder's Name: _____

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

10. List projects of a similar nature to the UNIVERSITY DRIVE WIDENING IMPROVEMENTS your firm has **completed** within the last five years. For each project, list the type of project, contract amount, date of completion, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Bidder's Name: _____

11. List the name of the person(s) **(A MINIMUM OF ONE)** who inspected the site of the proposed work for your firm.

Name:	**Date of Inspection:**

12. Complete the following in conformance with Labor Code Section 1725.5

Name of Subcontractor	Registered with DIR?	DIR Registration No.
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	

13. If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition or ability to perform the work.

    Failure to furnish information upon request will render the bid nonresponsive.

    All of the above statements regarding Contractor's experience and financial qualifications are submitted in conjunction with the Bid Proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

Bidder's Name: _____

THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS

The undersigned understands the contract time limit allotted for the completion of the work required by the Contract is **Two Hundred Forty (240) Working Days** (excluding plant establishment) and **Three Hundred (300) Working Days** (including plant establishment.)

The undersigned agrees, if awarded the Contract, to sign the Contract and furnish the necessary insurance certificates and bonds within ten (10) days of the date specified in the Notice of Award of Contract, not including Saturdays, Sundays and legal holidays, and to begin work within ten (10) Working Days from the date specified in the City's Notice to Proceed. Contract time accounting shall begin on the date shown in the Notice to Proceed.

Accompanying this Bid Proposal is **(check appropriate box)**:

☐ **Cash** ☐ **Cashier's Check** ☐ **Certified Check** ☐ **Bid Bond**

Sign Here if Individual:

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Co-Partnership:

Co-Partnership Name of Firm: _____

(Address) _____

_____

Members Signing:

(Signature) _____

(Print Name) _____

(Address) _____

_____

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Corporation:

(Name of Corporation) _____

(Address) _____

_____

Officers of Corporation Signing:

(Signature) _____

(Print Name) _____

(Title) _____

And

(Signature) _____

(Print Name) _____

(Title) _____

If executed by other than President and Secretary of the Corporation, attach a certified copy of resolution authorizing signature on behalf of the Corporation.

Affix notary's acknowledgement

LIST OF SUBCONTRACTORS

The Bidder shall list each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater. Complete columns (1) and (2) and submit with the bid. Complete columns (3) and (4) and submit with the bid or hand-deliver to the Receptionist for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207 within 24 hours after the bid opening. Failure to provide complete information in columns (1) through (4) within the time specified shall render the bid non-responsive.

Subcontractors listed must not be debarred from performing the designated work.

BUSINESS NAME and LOCATION (1)	CONTRACTOR LICENSE NUMBER (2)	BID ITEM NUMBERS (3)	PERCENTAGE OF BID ITEM SUBCONTRACTED (4)*

Information must be typed or clearly printed.

*** If you are subcontracting a whole bid item insert one hundred percent (100%), if less insert actual percentage.**

NON-COLLUSION DECLARATION-CONTRACTOR
To be Executed by Bidder and Submitted with Bid
City of Irvine Bid No.18-1304

The undersigned declares:

I am the _____ [title] of _____[company name], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date], at _____[city], _____[state].

_____
Signature

_____
Print Name

FORM OF BID BOND

UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306

(10% of the Proposal Amount)

KNOW ALL PERSONS BY THESE PRESENTS that we _____ _____ as Principal, and _____ _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ Dollars ($_____), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal submitted to the City a certain Bid Proposal, attached hereto and hereby made a part hereof, to enter into a contract in writing for the UNIVERSITY DRIVE WIDENING IMPROVEMENTS, CIP 311306 and will furnish all required certificates of insurance and bonds as required by the Contract.

NOW THEREFORE, if said Bid Proposal shall be rejected; or in the alternate, if said Bid Proposal shall be accepted, and the Principal shall execute and deliver a contract in the prescribed Form of Contract, shall deliver certificates evidencing that the required insurance is in effect and shall execute and deliver Performance and Payment Bonds in the forms prescribed, and shall in all other respects perform the Contract created by the acceptance of said Bid Proposal, then this obligation shall be void; otherwise this obligation shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. In the event suit is brought upon this bond by City and judgment is recovered, Surety shall pay all costs incurred by City in said suit, including a reasonable attorney's fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by an extension of the time within which the City may accept such a Bid Proposal; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party’s undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

FALSE CLAIMS

Bidder shall complete the **False Claims Act Certification** below or in the alternative, provide the information requested under **False Claims Act Violations** below. **Failure to certify or provide the requested information shall render the bid non-responsive.**

"False Claims Act" as used herein is defined as either or both the Federal False Claims Act, 31 U.S.C. § 3729, *et seq*., and the California False Claims Act, Government Code § 12650, et seq.

FALSE CLAIMS ACT CERTIFICATION

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act as defined above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

FALSE CLAIMS ACT VIOLATIONS

With regard to any determinations by a tribunal or court of competent jurisdiction that the False Claims Act, as defined above, has been violated by (1) the Contractor submitting this Bid Proposal or (2) the qualifying person licensed by the State Contractors License Board to perform the work described in this Bid Proposal, shall provide on a separate sheet the following information: (1) the date of the determination of the violation, (2) the identity of the tribunal or court, (3) the identity of the government contract or project involved, (4) the identity of the government department involved, (5) the amount of fine imposed, and (6) any exculpatory information of which the Agency should be aware.

CIVIL LITIGATION AND ARBITRATION HISTORY

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

For five (5) years preceding the submittal date of this Bid Proposal, identify civil litigation and arbitration arising out of the performance of a construction contract within the State of California in which the (1) Contractor submitting this bid proposal or (2) the qualifying person licensed by the State Contractors Licensing Board to perform the work described in this Bid Proposal was a named as a party in a lawsuit brought by or against the project owner or any action to confirm, vacate or modify an arbitration award involving an owner.

CIVIL LITIGATION AND ARBITRATION CERTIFICATION

If the Bidder has no civil litigation and arbitration history to report as described above, complete the following:

I _____ certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been involved in civil litigation and arbitration as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

Do not include litigation and arbitration which are limited solely to enforcement of mechanics' liens or stop notices. Provide on a separate sheet (1) the name and court case identification number of each case, (2) the jurisdiction in which it was filed, and (3) the outcome of the litigation, e.g. whether the case is pending, a judgment was entered, a settlement was reached, or the case was dismissed.

CRIMINAL CONVICTIONS

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

CRIMINAL CONVICTION CERTIFICATION

If the Bidder has no criminal convictions to report as described above, complete the following:

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been convicted of a criminal violation as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

For the five (5) years preceding the date of this Bid Proposal is due, identify on a separate sheet any criminal conviction in any jurisdiction in the United States for a violation of law arising out of the performance of a construction contract (1) by the Contractor submitting this Bid Proposal or (2) by the qualifying person licensed by the State Contractors License Board to perform the work described in the Bid Proposal.

Provide on the following page labeled “Criminal Convictions Information.” (1) the date of conviction, (2) the name and court case identification number, (3) the identity of the law violated, (4) the identity of the prosecuting agency, (5) the contract or project involved, (6) the punishment imposed, and (7) any exculpatory information of which the Agency should be aware.

VIOLATION OF LAW OR A SAFETY REGULATION

Has the Bidder, any officer of the Bidder, or any employee who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of a law or a safety regulation?

☐ **Yes** ☐ **No**

If the answer is yes, explain the circumstances in the following space.

Name of bidder (print)	Signature
Address	State Contractors' License No. & Classification
City Zip Code	Telephone

CONSTRUCTION CONTRACT
FOR CAPITAL IMPROVEMENTS

CITY OF IRVINE

UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306

This Contract made and entered into this _____ day of _____, 20__, by and between City of Irvine, a municipal corporation of the State of California, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

W I T N E S S E T H:

That the CITY and the CONTRACTOR, for the consideration hereinafter named, mutually agree as follows:

1. The complete Contract includes all of the Contract Documents, which are incorporated herein by this reference, to wit:

    a) Permits and Agreements

    b) Contract

    c) Addenda

    d) Instructions to Bidders, Proposal Requirements and Conditions

    e) Special Provisions

    f) Contract Plans

    g) Standard Plans (City of Irvine, Caltrans, SPPWC, OCPW)

    h) Standard Specifications

    i) Reference Specifications

    The Contract Documents are complementary, and that which is required by one shall be as binding as if required by all.

2. CONTRACTOR shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation services required for the following work of improvement: Traffic control, unclassified excavation, unclassified fill, construction of PCC curb ramps, median curb, curb & gutter, sidewalk, crack sealing, uniform depth cold milling, asphalt base course, asphalt concrete surface course, adjust utility manholes and valves to grade, installation of traffic signs, striping, pavement markings, and raised pavement markers, installation of new traffic signals, traffic signal modifications, SCE coordination and installation of new street light infrastructure, storm drain installation, landscaping, irrigation system, water quality BMPs, and other items not mentioned here, but are required by the plans and the Special Provisions.

3. CONTRACTOR agrees to perform all the said work and furnish all the said materials at his own cost and expense that are necessary to construct and

complete in strict conformance with Contract Documents and to the satisfaction of the Engineer, the work hereinafter set forth in accordance with the Contract therefore adopted by the City Council and as prepared by Harris & Associates, 22 Executive Park, Suite 200, Irvine, CA 92614

4. CITY agrees to pay and CONTRACTOR agrees to accept in full payment for performance of this work of improvement as described, the stipulated sum of

($_____) the "Contract Price."

CITY agrees to make progress payments and final payment in accordance with the method set forth in the Special Provisions.

5. CONTRACTOR agrees to commence construction of the work provided for herein within ten (10) Calendar Days after the date specified in the Notice to Proceed, and to continue diligently in strict conformance with Contract Documents and without interruption, and to complete the construction thereof within **Two Hundred Forty (240) Working Days Working Days** after the date specified in the Notice to Proceed.

The CONTRACTOR shall diligently prosecute all the work (including plant establishment) to completion before the expiration of **Three Hundred (300) Working Days** from the date specified in the Notice to Proceed.

6. Time is of the essence of this Contract, and it is agreed that it would be impracticable or extremely difficult to ascertain the extent of actual loss or damage which the CITY will sustain by reason of any delay in the performance of this Contract. It is, therefore, agreed that CONTRACTOR will pay as liquidated damages to the CITY the following sum: **Eight Thousand Two Hundred Thirteen Dollars ($8,213)** per Calendar Day, for each and every Calendar Days delay in finishing the Work except plant establishment work in excess of the number of Working Days prescribed above. The CONTRACTOR shall pay to the CITY the sum of **Five Hundred Dollars ($500)** per Calendar Day, for each and every Calendar Days delay in completing the plant establishment work in excess of the number of Working Days prescribed above. In no case will liquidated damages be assessed more than **Eight Thousand Two Hundred Thirteen Dollars ($8,213)** per day. If liquidated damages are not paid, as assessed by the CITY, the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under this Contract in addition to any other remedy available to CITY. By executing this Contract, CONTRACTOR agrees that the amount of liquidated damages is reasonable and shall not constitute a penalty.

7. In accordance with State of California Senate Bill No. 854, CONTRACTOR will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. CONTRACTOR shall notify the CITY in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that CONTRACTOR'S or any of its subcontractor's DIR registration status has been suspended, revoked, expired, or otherwise changed.

8. CONTRACTOR will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, a copy of which is on file in the office of the City Clerk of the City of Irvine. Federal prevailing wage rates apply for federally funded projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.

9. CONTRACTOR shall be subject to the penalties in accordance with Labor Code of § 1775 for each worker paid (either by him or by any subcontractors under him) less than the prevailing rate described above on the work provided for in this Contract.

10. CONTRACTOR and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the CONTRACTOR and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the CONTRACTOR to penalty and forfeiture provisions of the Labor Code § 1813.

11. CONTRACTOR will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.

12. CONTRACTOR, by executing this Contract, hereby certifies:

> "I am aware of, and will comply with the Labor Code § 3700 by securing payment for, and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the Agency before execution of the Contract. The CITY, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the CONTRACTOR to comply with this paragraph."

CONTRACTOR further agrees to require all subcontractors to carry Workers' Compensation Insurance as required by the Labor Code of the State of California.

13. CONTRACTOR shall, concurrent with the execution of this Contract, furnish two bonds approved by the CITY, one in the amount of One Hundred Percent (100%) of the Contract Price, to guarantee the faithful performance of the work "Performance Bond", and one in the amount of One Hundred Percent (100%) of the Contract Price to guarantee payment of all claims for labor and materials furnished "Payment Bond." This Contract shall not become effective until such bonds are supplied to and approved by the CITY.

14. CONTRACTOR shall, prior to commencing work, furnish certificates evidencing compliance with all requirements of the Contract Documents pertaining to insurance.

15. Any amendments to any of the Contract Documents must be in writing executed by the CONTRACTOR and the CITY. Any time an approval, time extension, or consent of the CITY is required under the Contract Documents, such approval, extension, or consent must be in writing in order to be effective.

16. This Contract contains all of the agreements and understandings of the parties and all previous understandings, negotiations, and contracts are integrated into and superseded by this Contract.

17. In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.

18. The persons executing this Contract on behalf of the parties hereto warrant that they are duly authorized to execute this Contract on behalf of said parties and that, by so executing this Contract, the parties hereto are formally bound to the provisions of this Contract.

19. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.

20. In performing its obligations and duties under this Contract, each party shall comply with all applicable local, state, and federal laws, regulations, rules, standards and ordinances.

21. In the event any action is brought between the parties hereto relating to this Contract or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.

22. This Contract may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

23. This Contract is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, the said CONTRACTOR and the Director of Public Works, City Manager, Mayor and City Clerk of the CITY have caused the names of said parties to be affixed hereto, the day and year first above written.

_____

CONTRACTOR

(If Corporation, 2 signatures are required)

By _____

_____

Print Name

_____

Title

By _____

_____

Print Name

_____

Title

CITY OF IRVINE
A Municipal Corporation

Donald P. Wagner
Mayor of the City of Irvine

Sean Joyce
City Manager of the City of Irvine

Manuel Gomez
Director of Public Works

ATTEST:

Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

Jeffrey Melching

PERFORMANCE BOND

UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306

KNOW ALL PERSONS BY THESE PRESENTS that we _____ _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____ _____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the original terms thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void otherwise this obligation shall remain in full force and effect.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modifications of the Contract Documents and/or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the contract documents and/or of the work to be performed thereunder.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, and all to be taxed as costs and included in any judgment rendered by a court of law.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

PAYMENT BOND

UNIVERSITY DRIVE WIDENING IMPROVEMENTS
CIP 311306

KNOW ALL PERSONS BY THESE PRESENTS that we _____ _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract, attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of each contract that may hereafter be made, then this obligation shall be void, otherwise this obligation shall remain in full force and effect.

The condition of this obligation is such that, if said Principal or his subcontractors, or heirs, executors, administrators, successors, or assigns thereof, shall fail to pay any of the persons named in the Civil Code § 9100 for any material used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or shall fail to pay any amount due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant or any amount required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his subcontractors with respect to such work and labor, then said Surety will pay and, also, in case suit is brought upon the bond, will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of all persons named in the aforesaid Civil Code § 9100 to give a right of action to them or their assigns in any suit brought upon the bond.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the Contract Documents and/or of the work to be performed thereunder.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party’s undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

SPECIAL PROVISIONS

A. THESE ADDITIONS, DELETIONS, AND AMENDMENTS MODIFY THE SPECIFICATIONS IN THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.

B. THESE ADDITIONS, DELETIONS, AND AMENDMENTS SHALL TAKE PRECEDENCE IN THE EVENT OF A CONFLICT WITH ANY STANDARD SPECIFICATIONS.

C. AS A CONVENIENCE, THESE ADDITIONS, DELETIONS, AND AMENDMENTS HAVE BEEN ARRANGED IN A FORMAT THAT PARALLELS THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.

PART 1 - GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS

REVISE as follows:

1-1 GENERAL. *ADD the following term:*

The word *provide* shall mean furnish and install.

1-2 TERMS AND DEFINITIONS. *MODIFY to ADD the following:*

Acceptance, Final Acceptance – Formal action by the Agency acknowledging the Work is complete.

Agency/Board/City – The City of Irvine, a municipal corporation.

Agency Representative – The person or engineering/architectural firm Agency authorizes to represent it during the performance of the Work by the Contractor and until Final Acceptance. The Agency Representative means the Agency Representative or his assistants.

Calendar Day – The 24-hour day denoted on the calendar.

Calendar Month – The period including the first through the last day of a month.

City – See Agency.

Clarification – Verbal or written interpretation of Contract Documents by the Agency Representative to clarify intent, procedures, materials or processes with no change in contract sum or time.

REPLACE the definition for "Engineer" with the following:

Engineer – The City Engineer acting either directly or through the Agency Representative.

Field Order – Authorization by Agency Representative to proceed with Change Order work after completion of negotiations, but before the issuance of the Change Order.

Laboratory – The laboratory authorized by the Agency or the Agency Representative to test material and work involved in the project.

Major Bid Item – A single Contract item constituting ten percent (10%) or more of the original Contract Price.

Request for Quotation – Contemplated revision of Contract Documents by the Agency requesting detailed information from the Contractor on impacts to contract sum or contract time.

State Standard Specifications – Standard Specifications issued by the State of California, Department of Transportation, 2015.

Traffic Control Devices – All signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway, by authority of the Engineer.

1-3. ABBREVIATIONS

1-3.2 Common Usage. *MODIFY to ADD the following:*

Abbreviation	Word or Words
CSMP	Construction Site Monitoring Program
DBE	Disadvantaged Business Enterprise
ESA	Environmentally Sensitive Area
HMA	Hot Mix Asphalt
NOI	Notice of Intent
SWMP	Storm Water Management Plan
SWRCB	State Water Resources Control Board
WPCP	Water Pollution Control Program
WDID	Waste Discharge Identification Number

DELETE the abbreviation of MUTCD and SUBSTITUTE with the following:

MUTCD	California Manual on Uniform Traffic Control Devices

1-3.3 Institutions. *MODIFY to ADD the following:*

Abbreviation	Word or Words
AI	The Asphalt Institute
AIA	American Institute of Architects
APWA	American Public Works Association
AREMA	American Railway Engineering and Maintenance of Way Association
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
CRSI	Concrete Reinforcing Steel Institute
NFPA	National Fire Protection Association
PCA	Portland Cement Association
SSPC	Steel Structures Painting Council
UBC	Uniform Building Code, Pacific Coast Building Officials Conference of the International Conference of Building Officials

SECTION 2 - SCOPE AND CONTROL OF THE WORK

REVISE as follows:

2-2 ASSIGNMENT. *MODIFY to ADD the following:*
The performance of the Contract may not be assigned, except upon the written consent of the Agency. Consent will not be given to any proposed assignment that would relieve the original Contractor or its Surety of their responsibilities under the Contract, nor will the Agency consent to any assignment of any part of the Work under the Contract.

Assignment of this Contract shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

2-3 SUBCONTRACTS.

2-3.1 General. *MODIFY to ADD the following:*
If the Contractor subcontracts any part of this Contract, the Contractor shall be as fully responsible to the Agency for the acts and omissions of his subcontractor as he is for the acts and omissions of persons directly employed by him. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Agency. The Contractor shall bind every subcontractor to be bound by the terms of the Contract Documents as applicable to his work.

Debarred contractors shall not be employed on the Work pursuant to the provisions of Labor Code § 1777.1 and the City of Irvine Council Ordinance No. 08-10. The Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site: http://www.dir.ca.gov/dlse/debar.html

A list of individuals, firms and organizations debarred, suspended or who have voluntarily excluded themselves from Federal Procurement and Non-Procurement Programs is maintained by the US General Services Administration. This excluded parties list is available from the website: http://www.sam.gov

In accordance with SB 854, the Contractor and each of its subcontractors shall maintain a valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

Prior to including a subcontractor's name on the bid, the Contractor shall be responsible for verifying that each of its subcontractors are properly licensed and not debarred from performing the designated work.

This requirement shall be enforced as follows: Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the Contract.

If any subcontractor or person employed by the Contractor is deemed by the Engineer to be incompetent or to act in an improper manner, at the request of the Engineer, they shall be dismissed immediately from the job and shall not be employed again on the Work.

A copy of each subcontract is required to be filed with the Agency before the subcontractor begins work. Each subcontract shall contain a reference to the Contract between the Agency and the Contractor, and the terms of that Contract and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract shall provide for its annulment by the Contractor at the order of the Agency if in the Agency's opinion the subcontractor fails to comply with the requirements of the Contract.

2-3.2 Self Performance. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall perform, with its own organization, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts, and at least 50 percent of the Contract Price on all other Public Works contracts except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

The provisions in 2-3.2 of these Special Provisions require that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original Contract Price is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal Aid Construction Contracts" of these Special Provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

2-3.3 Status of Subcontractors. *MODIFY to ADD the following:*
The City will not conduct business with an individual, firm or organization, and the Contractor shall not employ or otherwise use any subcontractor, supplier, or equipment vendor at any tier that is on the City's debarment list, the Department of Industrial Relations debarment list, or on the US General Services Administration "List of Parties Excluded from Federal Procurement and Non Procurement Programs."

2-5 PLANS AND SPECIFICATIONS.

2-5.1 General. *ADD the following after the 2nd paragraph:*
All work of the Contract including, but not limited to, the general nature and character of the work area and conducting of Contractors' operations shall be performed in accordance with the Standard Specifications for Public Works Construction, 2015 edition, and all supplements thereto, except as modified in these Special Provisions and as follows:

> Work to be performed which is directly related to the construction and/or modification of traffic, striping, signing, markings or signals; work within State right of way; and, work which is directly related to the construction of bridges and

bridge appurtenances shall be performed in accordance with the State Standard Specifications, current edition as of bid date.

As applicable, unless modified elsewhere in these Special Provisions, Work of the Contract shall conform to current editions of: Uniform Building, Plumbing, Mechanical Codes; Uniform Fire Code; National Electrical Code; and, City of Irvine amendments thereto.

DELETE last paragraph in its entirety and SUBSTITUTE with the following:

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Specifications and the Plans or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, the Contractor shall promptly notify the Agency of such discrepancy, error, or omission. If the Contractor observes that any plans or specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Agency in writing of such conflict.

The Agency, on receipt of any such notice, will investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after its discovery of such an error, discrepancy, or conflict that is directly or indirectly affected by such error, discrepancy, or conflict, will be at its own risk and it shall bear all cost arising therefrom.

The Agency will provide, free of charge, three (3) copies of Plans and Special Provisions for the Contractor and one (1) copy of Plans and Special Provisions for each subcontractor listed in the Bidder's Proposal. Any Plans or Special Provisions required by the Contractor/subcontractor in addition to the above can be provided by Agency at Contractor's expense. The Contractor shall keep one set of Plans and Special Provisions in good order and available to the Agency Representative at the site of the Work.

2-5.2 Precedence of Contract Documents. *DELETE the order of precedence and SUBSTITUTE with the following*:

a) Permits and Agreements
b) Change Orders and/or Supplemental Agreements; whichever occurs last
c) Contract
d) Addenda
e) Instructions to Bidders, Proposal Requirements and Conditions
f) Bid/Proposal
g) Special Provisions
h) Contract Plans
i) Standard Plans
j) Standard Specifications
k) Reference Specifications

ADD:

2-5.2.1 Interpretation of Plans and Specifications. Figured dimensions on Plans shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Specifications shall govern as to materials, workmanship, and installation procedures. Plans and Specifications requiring higher quality material or workmanship shall prevail. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Specifications, reference shall be made to Engineer whose decision thereon shall be final.

2-5.3 Submittals.

2-5.3.1 General. *MODIFY to ADD the following:*
The review period begins a new upon each submittal or resubmittal.

In providing specified submittals, the Contractor certifies that they are complete in all respects and all materials, equipment, and other work shown thereon conforms to the Contract Documents.

Where a manufactured item is designed or engineered by the manufacturer, fabricator, subcontractor, consultant or designee, the drawings and supporting calculations shall be stamped and signed by an engineer registered by the State of California executing the design within the scope of his registration. Unless otherwise accepted by the Engineer, data shall be submitted only by the prime Contractor. Data that, in the opinion of the Engineer, are incomplete or have not been checked by the prime Contractor or are illegible will be considered as not complying with the Contract requirements and will be returned to the Contractor for resubmittal in the proper form. The City may make this determination at any time during the review period.

Data shall be submitted in a format similar to the arrangement of the applicable section(s) of the Specifications unless otherwise specified. Any submittal not following the format specified, and not conforming to the requirements listed below, will be returned for resubmittal without review.

a) Data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices, the external connections, anchorages, and supports required, performance characteristics, dimensions needed for installation and correlation with other materials and equipment, and all additional information as required in the detailed section(s) of the Contract Documents. Identify field dimensions; show relation to adjacent or critical features, work or products.

b) Calculations to support the adequacy of the design in meeting specified performance ratings or requirements shall be submitted when required by the Specifications.

c) Each drawing or data sheet shall be clearly marked with the name of the project, the Contractor’s name, and references to applicable Specification paragraphs and Plan sheets. Submittals containing multiple drawings or data sheets shall be collated prior to submittal for review.

d) Data sheets, catalog cuts or drawings showing more than the particular item under consideration shall be marked to cross out all but the applicable information. Submit only pertinent pages; mark each copy of standard printed

data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

e) Data submitted shall include drawings showing wiring and/or pipe layouts. Any changes proposed by the Contractor shall be stated in a cover letter and essential details of such changes shall be clearly shown in the data submitted.

f) Present in a clear and thorough manner. Title each drawing with project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.

g) Provide manufacturer's preparation, assembly and installation instructions.

h) Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Engineer’s selection.

i) Submit samples to illustrate functional characteristics of products, including parts and attachments. Label each sample with identification required for transmittal letter. Approved samples which may be used in the Work are indicated in the Specification section.

j) Provide field samples of finishes for the Work, at location acceptable to Agency Representative, as required by individual Specifications section. Install each sample complete and finished. Finishes in place that have been accepted by the Agency Representative may be retained in completed work.

Submittals shall be accompanied by a letter of transmittal listing the contents of the submittal. Drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with sufficient time for Agency’s review and in orderly sequence in accordance with the progress schedule to cause no delay in prosecution of the Work. Drawings shall be submitted on 11”x17” or 24”x36” sheet sizes only. Any submittal not accompanied by such a transmittal, or where all applicable items on the form are not complete, will be returned for resubmittal.

A separate letter of transmittal shall be used for each specific item or class of materials or equipment for which a submittal is required. Transmittal of shop drawings on various items using a single letter of transmittal will be permitted only when the items taken together constitute a manufacturer’s “package” or are so functionally related that expediency indicates review of the group or package as a whole. Submittals transmitted by facsimile will not be accepted.

The Agency will return any submittal sent (1) without a transmittal letter, (2) with an incomplete form, or (3) by facsimile.

The Contractor shall assign a unique sequential number to each submittal package, which shall be clearly written in the space provided on the transmittal letter. This number shall be used in all correspondence to the Agency when referencing to a particular submittal. The Contractor shall be responsible for ensuring the same submittal number is not assigned to different submittal packages.

Resubmittals shall incorporate the original submittal number followed by the revision number (i.e., the first resubmittal of submittal #1 is numbered 1R1, the second 1R2, etc.). The Agency will return improperly numbered submittals without review. The Contractor shall indicate on the transmittal letter that either no exceptions to the Contract Documents are taken or deviations are submitted. All deviations indicated shall be listed on the transmittal letter and the Contractor shall be solely responsible for any omitted deviations. If any deviations are omitted, the Agency will return the submittal and the engineering data without review for resubmittal. Any consequences from the resulting delay shall be fully borne by the Contractor.

The Engineer's review of the Contractor's submittals will cover only general conformity to the Contract Documents. The Engineer's acceptance of drawings returned marked NO EXCEPTION TAKEN or RESUBMITTAL NOT REQUIRED (CORRECTIONS ARE NOTED) shall not constitute a blanket approval of dimensions, qualities, and details of the materials, equipment, device, or item shown, and does not relieve the Contractor from any responsibility for errors, omission or deviations from conforming to the Contract Documents. The Agency reserves the right to subsequently reject any previously accepted equipment, material, and/or construction method that deviates from the Contract Documents. When the drawings and data are returned marked CORRECT AND RESUBMIT, the corrections shall be made as noted thereon and as instructed by the Engineer, resubmittal shall be made in the same manner as the original submittal.

If the Engineer rejects the submittals, the Contractor is responsible for any subsequent time delays at no additional compensation from the Agency. Subject to these requirements, drawings and data, after final processing by the Engineer, shall become a part of the Contract Documents, and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the Engineer. In the event of conflict between accepted submittals and the other Contract Documents, the most stringent requirements shall apply unless the Agency has agreed in writing to less stringent requirements in response to a deviation listed on a submittal letter of transmittal.

No portion of the work requiring a submittal shall be commenced until the submittal has been reviewed by the Engineer and returned to the Contractor with a notation indicating that resubmittal is not required.

The review by the Engineer is only of general conformance with the design concept of the project, and general compliance with the Contract Documents and shall not be construed as relieving the Contractor of these full responsibilities for providing materials, equipment, and work required by the Contract; the proper fitting and construction of the Work; the accuracy and completeness of the submittals; selecting fabrication processes and techniques of construction; and performing the Work in a safe manner.

2-6 WORK TO BE DONE. *ADD the following after the 1st paragraph:*
The Contractor shall leave the Work area in a neat condition. Any work not shown in the Plans or Specifications but necessary to complete the Work according to law and governmental codes and regulations shall be performed by the Contractor as if in the Plans and Specifications.

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the Work. Where such obstructions consist of

improvements not required by law to be removed by the Agency thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense.

2-8 RIGHT OF WAY. *DELETE the 1st sentence and SUBSTITUTE with the following:* Rights of way, easements, agreements, licenses, or rights of entry (all referred to as right of way) for the Work have been provided by the Agency. Temporary right-of-way to construct one or more portions of the Work may also have been acquired by the Agency. If temporary right of way was acquired, the documents or their contractual terms and obligations are included in the Contract Documents. The Contractor shall comply with all the terms and obligations related to the physical use of the temporary right of way and its eventual return of the property to the owner. The Contractor shall schedule the Work that may include landscape establishment, maintenance periods, and final acceptance within the temporary right of way to start and finish within the time allotted in each temporary right of way agreement. Should the Work be delayed through no fault of the Agency, the Contractor shall be responsible for all costs incurred by the Agency to extend use of the temporary right of way.

MODIFY to ADD the following:

Work in the public right of way shall be done in accordance with the requirements of the permit issued by the public agency in whose right of way the Work is located in addition to conforming to the Contract Documents. If a permit or traffic control plan is not required, the Work shall conform to the standards set forth in the MUTCD.

The Contractor shall not allow his employees to use private property for any reason or to use water or electricity from such property without providing the City written permission from the owner. The Contractor shall comply with all applicable federal, state and local laws, ordinances, codes and regulations in performing any work or doing any activity on lands outside the public rights of way.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Agency Representative and each of their officers, employees, and agents from all claims or suits for damages occasioned by such work or activity, whether done according to this section and with permission from the Agency or in violation of this section without permission from the Agency. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claims or suits.

The Contractor shall comply with City of Irvine Municipal Code § 5-9-521 Construction Site and Vacant Property Security, and be fully responsible for locating and obtaining permission to use equipment yards or material storage site(s). The Contractor shall assume full responsibility and costs for property rental, site preparation, maintenance and cleanup in a manner satisfactory to the City and the property owner.

If, through the failure of the Agency to acquire or clear right of way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, the Contractor will be paid an amount as the Engineer may find to be a fair and reasonable compensation for such part of the Contractor's actual loss as, in the opinion of the Engineer, was unavoidable, determined as follows:

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for as provided in 3-3 with the following exceptions:

a) The right of way delay factor for each classification of equipment shown in the State of California, Department of Transportation publication entitled “Equipment Rental Rates and Labor Surcharge,” current edition at the time of bid opening will be applied to such equipment rental rate.

b) The time for which such compensation will be paid will be the actual normal working time during which such delay condition exists, but in no case will exceed eight (8) hours in any day.

c) The days for which compensation will be paid will be the Calendar Days, excluding Saturdays, Sundays and legal holidays, during the existence of such delay.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of men, cost of extra moving of equipment, and cost of longer hauls. Compensation for idle time of equipment will be determined, as provided herein, and compensation for idle time of men will be determined as provided in 3-3.

If the performance of the Contractor's work is delayed as a result of the failure of the City to acquire or clear right of way, an extension of time determined pursuant to the provisions in 6-6 will be granted.

2-9 SURVEYING.

2-9.2 Survey Service. *DELETE the 1st sentence in the 1st paragraph and SUBSTITUTE with the following:*
The Agency will engage a licensed land surveyor or civil engineer registered in the State of California to perform surveying and calculations required by the Work of this Contract. All survey requests and directions to the survey team will be handled through the Agency Representative.

DELETE the last sentence in the 1st paragraph and SUBSTITUTE with the following:

Staking will be in accordance with Chapter 12 “Construction Surveys” of the State of California, Department of Transportation “Survey Manual.” A copy of the Manual is available at http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/12_Surveys.pdf.

Any construction stakes required in addition to those listed in the “Survey Manual”, or any re-staking required by loss of stakes, or additional costs encountered by significant delays or conditions which cause the use of more difficult survey methods during field operations and which are, in the judgment of the Agency, caused by interference of Contractors' operations, equipment or materials, shall be paid for by the Contractor at the hourly rate schedule of the Agency's surveying firm. Costs shall be deducted from any monies due or to become due the Contractor and any delays due to the replacement or restoration of stakes shall be the responsibility of the Contractor.

The Contractor shall submit to the Agency Representative a completed City of Irvine construction staking form with an assigned sequential number, description of specific items, locations and date required, together with supplemental drawings and/or data as necessary to facilitate surveying as required.

ADD:

2-9.5 Conformity with Contract Documents. The Work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Contract Documents and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Engineer shall govern.

2-10 AUTHORITY OF BOARD AND ENGINEER. *MODIFY to ADD the following:*
The Contractor is subject to the provisions of Government Code § 8546.7, which provides that this Contract and related documents are subject to the examination and audit of the State Auditor, at the request of the Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Contract.

The Agency reserves the right to audit the Contractor's books, records, and documents related to the Contractor's performance and the Contractor's compliance with all of the terms and conditions of this Contract at any time. Upon request by Agency, Contractor shall prepare and submit to Agency any reports concerning Contractor's performance of the services rendered under this Contract. With 72 hours advance written notice delivered to Contractor, Agency shall have access to the books, records and documents of Contractor related to Contractor's performance of this Contract in the event any audit is requested.

All drawings, documents, and other materials prepared by Contractor in the performance of this Contract:

a) Shall be the property of Agency and shall be delivered at no cost to Agency upon request of Agency or upon the termination of this Contract, and

b) Are confidential and shall not be made available to any individual or entity without prior written approval of the Agency.

2-11 INSPECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
Inspection of the Work will be conducted by an Agency Representative and will include monitoring and enforcing compliance of materials, equipment, installations, workmanship, methods and requirements of the Contract Documents.

The Agency Representative shall, at all times, have safe access to the Work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the Work.

Whenever the Contractor varies the work hours in which inspection is required, the Contractor shall give at least two (2) Working Days written notice to the Agency Representative so that inspection may be made.

All installations which are to be backfilled or otherwise covered will be inspected by the Agency Representative prior to backfilling or covering. The Contractor shall give the Agency Representative a minimum of two (2) days advance notice prior to backfilling or covering any part of the Work.

Work or materials concealed or performed without the prior notice specified above, will be subject to such tests or exposure as may be necessary to prove to the satisfaction of the Engineer, that all materials used and the work done are in strict conformity with the Contract Documents. All labor and equipment necessary for exposing and testing shall be furnished and paid for by the Contractor. The Contractor shall replace, without additional cost to the Agency, any materials or work damaged by exposure or testing.

Defective work shall be made good at the Contractor's expense including any unsuitable materials and equipment that may have been previously inspected by the Agency Representative, and/or that payment therefore has been included in an estimate for payment.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all requirements of the Contract.

All submittals and correspondence between the Agency and the Contractor, related to inspection of the Work of this Contract, shall be directed to the Engineer.

ADD:

2-11.1 Inspection Requirements. The Contractor shall notify the Agency Representative a minimum of 48 hours before inspection is required.

a) Unless specified elsewhere in the Special Provisions, inspection of the Work will be provided by the Agency between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, exclusive of Agency holidays. Any inspections requested by or made necessary as a result of the actions of the Contractor beyond the hours stated above shall be paid for by the Contractor at the prevailing rate of 1-1/2 times the regular hourly wage rate, plus 21% for overhead costs.

   The Contractor shall submit a request to the Engineer for approval, a minimum five (5) Calendar Days, in advance of inspections requested by or made necessary as a result of the actions of the Contractor on Saturdays, Sundays or Agency and/or Federal holidays. The Contractor shall pay for these inspections at the prevailing rate of 1-1/2 times for Saturdays and 2 times the regular hourly wage rate for Sundays or Agency and/or Federal holidays plus associated overhead costs.

   For purposes of this section, the following holidays are observed by the Agency:

   New Year's Day
   Martin Luther King Jr. Day
   Presidents' Day
   Memorial Day
   Independence Day
   Labor Day
   Veterans Day
   Thanksgiving Day

Day after Thanksgiving
Christmas Eve
Christmas Day

A construction calendar showing the days that each of the above holidays will be observed is available upon request from the Engineer.

b) The Contractor shall telephone the designated Agency Representative at least two (2) Working Days prior to starting construction or resuming construction following suspension of the Work for any reason.

Prior to commencing any work on the Contract, the Contractor shall submit a completed Inspection Overtime Permit form provided by the City of Irvine.

c) In addition to any inspection required by Codes and/or Ordinances or Contract Documents, Contractor shall notify the Engineer a minimum of 2 days prior to the permanent concealment of any materials or work. The following list is typical but not all inclusive of such required inspections:

1) Foundation/subgrade material, footing and slab beds
2) Reinforcing for concrete, masonry and plaster
3) Contact surface of concrete forms
4) Concrete and masonry surfaces
5) Piping and conduit
6) Finish grade prior to paving, seeding or planting
7) All soil mixes prior to installation
8) All chemicals and amendments prior to installation or application

2-12 SPECIAL NOTICES. *MODIFY to ADD the following:*
Any notice required or given by one party to the other under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by a duly authorized representative of such party. Any such notices shall not be effective for any purpose whatsoever, unless served in the following manner:

a) If the notice is given to the Agency, by personal delivery or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to the Agency, postage prepaid and registered.

b) If the notice is given by the Engineer to the Contractor by personal delivery to said Contractor or to his authorized representative or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to said Contractor at his regular place of business or such other address as may have been established for the conduct of the work under this Contract, postage prepaid and registered.

c) If notice is given to the surety or any other person by personal delivery to said surety or other person, or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to such surety or person at the address of said surety or person last communicated by him to the party giving the notice, postage prepaid and registered.

ADD:

2-13 CORRESPONDENCE. Unless specified otherwise or requested by the Engineer, the use of facsimile (fax) machines or internet email for the transmittal of routine correspondence, including submittals, shall not be allowed. The City will allow the use of fax machines or internet email for urgent matters such as notification of change of conditions. Unless otherwise allowed by the Engineer, all faxes or internet email shall be directed to the Engineer. The fax number and internet email address for the Engineer will be provided at the pre-construction meeting. Faxes or internet email received after 2:00 p.m. shall be considered as being received the following working day. All faxes or internet email shall be followed up with a paper copy that is mailed to the Engineer on the same day the fax or internet email is forwarded. The Engineer will not accept any illegible faxed or internet email correspondence.

ADD:

2-14 CONTRACT COORDINATION. The Contractor shall coordinate scheduling, submittals, and the Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

In addition to weekly progress meetings, as required by the Agency, the Contractor shall hold coordination meetings and pre-installation conferences with Agency Representatives and subcontractors to assure coordination of Work.

Should the Agency exercise partial Acceptance or beneficial occupancy of premises, the Contractor shall coordinate access to site to complete work or to correct defective work and work not in strict conformance with Contract Documents to minimize disruption of Agency's activities.

SECTION 3 - CHANGES IN WORK

REVISE as follows:

3-1 CHANGES REQUESTED BY THE CONTRACTOR.

3-1.1 General. *ADD the following after the 1st paragraph:*
The Contractor may initiate changes by submitting a written Change Order Request to the Engineer containing:

a) Description of the proposed changes.

b) Statement of the reason for making the changes.

c) Reference applicable specifications sections and specific plans in support of the request.

d) Statement of the effect on the Contract Price and Contract time.

e) Statement of the effect on the work of separate subcontractors.

f) Documentation supporting any change in Contract Price or Contract time as appropriate.

3-2 CHANGES INITIATED BY THE AGENCY.

3-2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may issue a Change Order for modifications of Work including, but not limited to, the Plans, Specifications, character, quantity or time of Work. Change Orders shall be in writing and state the dollar value of the change or establish the method of payment, and any adjustment in the Contract time of completion.

The Engineer may order minor changes in the Work not involving an increase or decrease in the contract amount, nor involving a change in the time for completion but consistent with the purposes for which the works are being constructed. If the Contractor believes that any order for minor changes in the work involves changes in the Contract Price or time of completion, the Contractor shall not proceed with the minor changes so ordered and shall immediately, upon the receipt of such order, notify the Engineer in writing of his estimate of the changes in the Contract Price and time of completion he believes to be appropriate.

No payment for changes in the Work will be made and no change in the time of completion by reasons of changes in the Work will be made, unless the changes are covered by a written Change Order approved by the Agency in advance of the Contractor's proceeding with the changed work.

Once a Change Order is finalized and executed by both parties, the Contractor waives its right to seek any additional compensation for the work covered by the Change Order or any project impacts. The Contractor agrees that all Change Orders constitutes full payment for the work covered by the Change Orders, including all direct and indirect overhead expenses.

Notwithstanding any other provision in the Contract Documents, the Agency’s issuance of a Change Order shall not constitute a waiver by the Agency of, or preclude the Agency in any way from, asserting any claim with respect to the same, including but not limited to, a

claim of breach of contract or claim that the issued Change Order covers work included in the scope of Work set forth in the Contract Documents for which the Contractor was not entitled to any additional funds.

A Change Order is approved when the Agency signs the Change Order.

A Contract Change Order approved by the Engineer may be issued to the Contractor at any time. Should the Contractor disagree with any terms or conditions set forth in an approved Contract Change Order not executed by the Contractor, the Contractor shall proceed with the Change Order work in accordance with 3-5 of the Standard Specifications, and submit a written protest to the Engineer within fifteen (15) days after the receipt of the approved Contract Change Order. The protest shall state the points of disagreement citing the Specification references, quantities and costs involved. If a written protest is not submitted, payment will be made as set forth in the approved Contract Change Order, and that payment shall constitute full compensation for all work included therein or required thereby. Unprotested approved Contract Change Orders will be considered as executed Contract Change Orders.

The Engineer may initiate changes by submitting a Request for Quotation to Contractor. Such request will include detailed description of the change, products, and location of the change in the Work, supplementary or revised Plans and Specifications. Such request is for information only and is not an instruction to execute the changes, or to stop work in progress.

The Contractor shall support each quotation for a lump-sum proposal, and for each unit price that has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.

On request, the Contractor shall provide additional data to support time and cost computations, labor required, equipment required, products required, recommended source of purchase and unit cost, and quantities required, taxes, insurance and credit for work deleted from Contract, similarly documented, justification for any change in Contract time.

The Contractor shall support each claim for additional costs, and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information as follows:

a) Name of the Agency Representative who ordered the work, and date of the order.

b) Dates and times work was performed, and by whom.

c) Time record, summary of hours worked, and hourly rates paid.

d) Receipts and invoices for equipment used, listing dates and times of use, products used, listing of quantities, and subcontracts.

In lieu of a Request for Quotation, the Engineer may issue a written Field Order for the Contractor to proceed with a change for subsequent inclusion in a Contract Change Order. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change and will designate the method of determining any change in the Contract Price and any change in Contract time. Agency Representative will sign and date the Field Order as authorization for the Contractor to proceed with the changes. Contractor may sign and date the Field

Order to indicate agreement with the terms therein. Contractor shall proceed with the work so ordered prior to actual receipt of an approved Contract Change Order.

3-2.2 Contract Unit Prices.

3-2.2.1 General. *ADD the following after the 2nd paragraph:*
In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change, which together with all previous changes to that item, is not in excess of twenty-five percent of the total cost of such item based on the original quantity and Contract Unit Price.

3-2.2.2 Increases of More than 25 Percent. *MODIFY to ADD the following:*
If payment for units of a bid item that exceeds125 percent of the price shown on the Bid Item List is less than $5,000 at the unit price, the Engineer may not adjust the unit price unless asked to do so in writing by the Contractor.

3-2.4 Agreed Prices. *ADD the following after the 1st sentence:*
Agreed prices shall be negotiated before commencement of the changed work.

3-3 EXTRA WORK.

3-3.2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
When the price for the extra work cannot be agreed upon prior to the commencement of the work, the Agency will pay for the extra work based on the accumulation of costs as provided herein.

3-3.2.2.3 Tool and Equipment Rental. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The rates to be used for determining equipment rental costs shall be those rates listed for such equipment in the State of California, Department of Transportation (Caltrans) publication entitled “Equipment Rental Rates and Labor Surcharge”, which is in effect on the date upon which the work is accomplished, regardless of ownership and any rental or other agreement entered into by the Contractor, if such may exist, for the use of such equipment. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, the Engineer will establish a suitable rental rate for such equipment. The Contractor may furnish any cost data, which might assist the Engineer in the establishment of such rental rate. Equipment Rental Rates and Labor Surcharge publication is available from Caltrans at http://www.dot.ca.gov/hq/construc/equipmnt.html. Rental time will not be allowed while equipment is inoperative due to breakdowns.

Operators of rented equipment will be paid for as provided in 3-3.

3-3.2.3 Markup.

3-3.2.3.1 Work by Contractor. *DELETE in its entirety and SUBSTITUTE with the following:*
The following percentages will be added to the Contractor’s costs as determined under 3-3.2.2 and shall constitute the markup for all overhead, increase in Contractor’s bonds, administrative expenses and profit on work by the Contractor:

a) Labor 20%

b) Materials 15%

c) Equipment Rental 15%

d) Other Items and Expenditures 15%

3-3.2.3.2 Work by Subcontractor. *DELETE in its entirety and SUBSTITUTE with the following:*
When any part of the extra work is performed by a subcontractor, of any tier, the markup established in 3-3.2.3.1 shall be applied to the subcontractor's actual cost of such work. Contractor markup on subcontractor work shall be limited to five percent .

No payment shall be made for any item not set forth in 3-3.2.3.1 and 3-3.2.3.2, including without limitation, Contractor's overhead, general administrative expense, supervision or damages claimed for delay in prosecuting the remainder of the work.

This provision shall not be construed to preclude the recovery of damages by the Contractor stemming from delay for which the Agency is responsible, which is unreasonable under the circumstances involved, and which was not within the contemplation of the Agency and the Contractor.

3-3.3 Daily Reports by Contractor. *ADD the following after the 1st sentence:*
The Contractor shall notify the Agency Representative at the beginning of each day when extra work is in progress. No payment will be made for work not verified by the Agency Representative.

SECTION 4 - CONTROL OF MATERIALS

REVISE as follows:

4-1 MATERIALS AND WORKMANSHIP.

4-1.1 General. *ADD the following before the 1st sentence in the 1st paragraph:*
The Contractor shall furnish all materials required to complete the Work, except materials that are designated in the Special Provision to be furnished by the Agency.

ADD:

4-1.1.1 Contractor Equipment and Plants. Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project. Such equipment and plants shall be maintained in a good state of repair during the process of the Work. No obsolete or badly worn equipment and plants shall be used. Manufacturer's ratings shall not be exceeded.

Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to ensure a production rate of sufficient material to carry to completion within the time limit(s) specified in the Contract Documents, if any.

The Contractor, when ordered by the Engineer, shall remove unsuitable equipment from the work site and discontinue the operation of unsatisfactory plants and equipment.

ADD:

4-1.1.2 Adoption or Revision Date for Standards, Codes, and Tests. Whenever reference is made to a standard, code, specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code; specification or test in effect on the day of the Notice Inviting Bids is dated.

In accordance with the Public Contract Code § 3400, the Contractor shall submit data substantiating requests for substitution of “equal” items within thirty-five (35) days of Contract award or before ten percent of the Contract Working Days have expired, whichever is less. This time is included in the number of Working Days allowed for the completion of the Work. The Engineer’s decision regarding the acceptability of the substitution is final.

Materials, equipment, and supplies provided shall, without additional charge to Agency, fully conform with all applicable local, State and Federal safety laws, rules and regulations, and orders, and it shall be the Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefore on that particular material, equipment or supply as specified.

4-1.3 Inspection Requirements. *ADD the following before the 1st paragraph:*
Materials to be used in the Work will be subject to inspection and tests by the Engineer. The Contractor shall furnish without charge such samples as may be required. The Contractor shall furnish the Engineer a list of his sources of materials and the locations at which such materials will be available for inspection a minimum of twenty (20)

Calendar Days in advance of their intended use. The Engineer may inspect, sample or test materials at the source of supply or other locations, but such inspection, sampling or testing will not be undertaken until the Engineer is assured by the Contractor of the cooperation and assistance of both the Contractor and the supplier of the material. The Contractor shall assure that the Engineer has free access at all times to the material to be inspected, sampled or tested. It is understood that such inspections and tests, if made at any point other than the point of incorporation in the Work, in no way shall be considered as a guarantee of acceptance of such material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the Agency shall not relieve the Contractor or his suppliers of responsibility for quality control.

Manufacturers' warranties, guarantees, instruction sheets and parts lists, which are furnished with certain articles or materials incorporated in the Work, shall be delivered to the Engineer before acceptance of the Contract Work.

Reports and records of inspections made and tests performed when available at the site of the Work, may be examined by the Contractor.

4-1.3.1 General. *MODIFY to ADD the following:*
The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The Agency assumes no obligation to inspect materials at the source of supply.

4-1.4 Test of Materials. *MODIFY to ADD the following:*
The Contractor shall furnish the Agency Representative with a list of his sources of materials in sufficient time to permit proper inspection and testing of materials to be furnished for such listed sources in advance of their use. The Contractor shall furnish without charge such samples as may be required.

Inspection and tests will be made by the Agency Representative or his designated representative, but it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as guarantee of acceptance of such materials nor of continued acceptance of materials, presumed to be similar to that upon which inspection and tests have been made.

Tests of materials will be made in accordance with commonly recognized procedures of technical organizations and such special procedures as prescribed in the Contract Documents. Materials will be sampled and tested at such times during the process of the Work as deemed desirable by the Engineer, the Contractor shall cooperate in obtaining the samples.

ADD:

4-1.4.1 Testing Laboratory. The Contractor shall employ and pay for services of an independent testing laboratory, subject to approval by the Agency, to perform other testing and inspections services required by the Contract Documents.

Prior to start of Work, the Contractor shall submit his testing laboratory name, address and telephone number, and names of full-time registered engineer and responsible officer.

Employment of testing laboratories will in no way relieve Contractor of its obligation to perform the Work in accordance with Contract Documents.

Laboratory field technicians employed by the Agency shall have no authority to release, revoke, alter, or enlarge on requirements of Contract Documents, or to approve, accept or stop any portion of the Work.

The Contractor shall:

a) Cooperate with laboratory personnel, provide access to work, arrange access to manufacturer's operations.

b) Provide the laboratory with preliminary representative samples of materials to be tested, in required quantities.

c) Furnish copies of mill test reports.

d) Provide casual labor and facilities for access to work being tested; obtain and handle samples at the site; facilitate inspections and tests; provide facilities for the laboratory's exclusive use for storage and curing of test samples.

e) Coordinate requests for testing through the Agency Representative. Notify Agency Representative a minimum of three (3) Working Days in advance of operations to allow for assignment of personnel and scheduling of tests.

f) Pay for additional laboratory inspections, sampling and testing required for Contractor's convenience and when initial tests indicate that work does not comply with Contract Documents.

g) When required by the Contract Documents, submit manufacturer’s certificate, executed by responsible officer, certifying that the product(s) meet or exceed specified requirements. Provide certification in duplicate.

4-1.6 Trade Names or Equals. *MODIFY to ADD the following:*
The Contractor shall submit products list in accordance with the following:

a) Within the time specified in 4-1.1.2 of the Standard Specifications and these Special Provisions, transmit number of copies Contractor needs plus four (4) of a list of major products which are proposed for installation, including name of manufacturer. Tabulate products by specification section number, title and article number.

b) For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

c) The Engineer will reply in writing, stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

The following limitations shall apply to substitutions:

a) During the bidding period, Instructions to Bidders govern times for submitting requests for substitutions under requirements specified in this Subsection.

b) Requests for substitutions of products will be considered only within the time period specified in the Contract Documents. Subsequent requests will be considered only in the case of product unavailability or other conditions beyond control of Contractor. Material delivery schedules will not be considered justification for substitution.

c) Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request or when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.

d) Substitute products shall not be ordered or installed without written acceptance by the Engineer.

e) Only one request for substitution for each product line will be considered. When substitution is not accepted, provide specified product.

f) The Engineer will determine acceptability of substitutions.

Requests for substitutions shall conform to the following:

a) Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.

b) Identify product by specifications section and article numbers. Provide manufacturer's name and address, trade name or product, and model or catalog number. List fabricators and suppliers, as appropriate.

c) Give itemized comparison of proposed substitution with specified product, listing variations, and reference to specifications section and article numbers.

d) Give cost data comparing proposed substitution with specified product, and amount of net change to Contract sum.

e) List availability of maintenance services and replacement materials.

f) State effect of substitution on construction schedule, and changes required in other work or products.

Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product. The Contractor shall provide the same warranty for the substitution as for the specified product, shall coordinate installation of accepted substitute, making such changes as may be requested for Work to be complete in all respects, certifies that cost data presented is complete and includes all related costs under this Contract and waives claims for additional costs related to substitution which may later become apparent. The Contractor shall submit the number of copies the Contractor needs plus four of request for substitution. For accepted products, submit shop drawings, product data and samples, and tests conducted in accordance with 2-5.3.

ADD:

4-1.10 Agency-Furnished Materials. Materials which are listed as Agency-furnished materials in the Special Provisions will be available to the Contractor free of charge.

The Contractor shall submit a written request to the Engineer for the delivery of Agency-furnished material at least fifteen (15) Working Days in advance of the date of its intended use. The request shall state the quantity and the type of each material.

The locations at which Agency-furnished materials will be available to the Contractor free of charge will be designated in the Special Provisions. In those cases, the materials shall be hauled to the site of the Work by the Contractor at the Contractor's expense, including any necessary loading and unloading that may be involved. If the locations are not designated in the Special Provisions, the Agency-furnished materials will be furnished to the Contractor free of charge at the site of the Work. In either case, all costs of handling and placing Agency-furnished material shall be considered as included in the price paid for the contract item involving the Agency-furnished material.

The Contractor shall be responsible for Agency-furnished materials furnished to the Contractor, and shall pay all demurrage and storage charges. Agency-furnished materials, once furnished, delivered, or picked-up by the Contractor, that are lost or damaged from any cause whatsoever shall be replaced by the Contractor at the Contractor's expense. The Contractor shall be liable to the Agency for the cost of replacing Agency-furnished materials, and those costs may be deducted from any monies due or to become due the Contractor. All Agency-furnished material that is not used on the Work shall remain the property of the Agency, and the Contractor shall arrange with the Agency Representative for delivery back to the Agency at Contractor’s expense.

SECTION 5 - UTILITIES

REVISE as follows:

ADD:

5-0 GENERAL. For purposes of this Section 5, the terms referenced below are defined as follows:

An “unidentified” underground main or trunk line utility is one that is not indicated at all on the Plans, and a “misidentified” underground main or trunk line utility is one that is not indicated on the Plans with reasonable accuracy (a “misidentification”). An underground main or trunk line utility is indicated on the Plans with reasonable accuracy unless its actual location is substantially and materially different from that indicated on the Plans.

The term “rearrangement” of utilities means the relocation, alteration, reinstallation, and/or reconstruction of utilities (including removal of existing utilities incidental thereto) as necessary in order to accommodate the Work. Whenever in this Section 5 reference is made to any one or more of these rearrangement activities, such reference shall be deemed to include all other such activities as required in order to accommodate the Work.

5-1 LOCATION. *MODIFY to ADD the following:*
A list of utility companies that have facilities located within or near the construction area is included in the Special Provisions. The Engineer has endeavored to determine the existence of utility substructures at the site of the Work by reviewing the records of the owners of known utilities in that vicinity and consulting with those owners, and based on that information has indicated on the Plans those utility substructures (except for service connections) that may affect the Work.

The Contractor acknowledges that the utility information provided on the Plans and Special Provisions has not been verified and may not be accurate or complete. Except as expressly provided in this Section 5, the Contractor may not rely upon such utility information and the City assumes no responsibility for its accuracy or completeness. Changed conditions within the scope of 3-4 do not include utilities.

The Contractor shall determine the exact location (both horizontal and vertical), type and size of all existing utilities, including service connections, prior to commencing work which could result in damage to such utilities or could otherwise affect or be affected by such utilities or interfere with the service they provide. Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the Plans, the Contractor shall assume that every adjacent property parcel will be served by a service connection for each type of utility shown. The Contractor shall do such investigation, research, surveys and potholing as the Contractor deems necessary to make such determinations. The Contractor shall immediately notify the Engineer as to any utility discovered by it which is in a different position than indicated on the Plans or is not indicated at all on the Plans.

The Contractor's cost of locating any unidentified or misidentified underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3; provided, however, that the Contractor will not be entitled to such additional compensation if the existence and location (with reasonable accuracy) of such utility was (or should have been) known to the Contractor as of the date on which the Bids were due or could

otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of locating all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The information regarding underground and internal utilities and appurtenances which the Contractor is required to record in the Record Documents as specified in 7-16 shall include (but not be limited to) the accurate locations of underground utilities determined pursuant to this 5-1 and remaining in place, as well as utilities rearranged by either the Contractor or the utility owners.

At least two (2) Working Days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California [USA] at 1-800-422-4133) to obtain an inquiry identification number. The Contractor shall comply in all respects with California Government Code § 4216 *et seq.*

Caltrans is not required by Section 4216 *et seq.* to become a member of the regional notification center. The Contractor shall contact Caltrans for the location of its subsurface installations. In addition, the Contractor shall be aware that non-pressurized sewer lines, non-pressurized storm drains, and other non-pressurized drain lines are not required by § 4216 *et seq.* to be marked by the respective owners. The Contractor shall contact those utility owners as necessary to locate their subsurface installations.

The Contractor shall request the City of Irvine Traffic Operations Division at 949-724-7649 to locate any existing traffic signal conductors and interconnect within the construction area before performing Work that may affect or be affected by the existing facilities.

Except as expressly provided in this Section 5 with respect to unidentified or misidentified underground main or trunk line utilities, the failure of any utility company to accurately mark its facilities shall not be justification for a time extension or for additional compensation from the City.

The Contractor shall obtain photographs of all markings made by its forces as well as all USA markings. All such photographs shall show the subject markings in relation to one or more identifiable landmarks that will remain in place after completion of the Work and completion of any utility removal and/or rearrangement work in the vicinity.

The right is reserved to governmental agencies and to the owner of utilities to enter at any time upon any street, alley, right of way, or easement for the purpose of maintaining and making repairs to their property.

5-1.2 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for utility location by the Contractor shall be included in the various items of work and no additional compensation will be allowed therefor.

5-2 PROTECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities potentially impacted by the Work, the Contractor shall, unless otherwise specified on the Plans or in the Special Provisions, furnish and place the necessary protection and support.

Any additional cost incurred by the Contractor for protecting and supporting an unidentified underground main or trunk line utility or resulting from the misidentification of an underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3, unless such utility's existence and location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of protecting and supporting all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged in the course of the Work. The Contractor shall, if directed by the Engineer, restore, repair or replace any such disturbed or damaged utility.

For any unidentified or misidentified underground main or trunk line utility that is disturbed or damaged in the course of the Work, the cost of restoration, repair or replacement incurred by the Contractor, if not made necessary by the Contractor's failure to perform its obligations pursuant to the Contract Documents (including without limitation Section 5-1) or to otherwise exercise reasonable care, will be paid for as an addition to the Work in accordance with Section 3. Except where additional compensation is allowed pursuant to this paragraph, all utilities disturbed or damaged in the course of the Work shall be restored, repaired or replaced at the Contractor's cost and expense, either by the utility owner or by the Contractor.

To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any claims or liabilities (as defined therein) that may be asserted or claimed by any person or entity arising out of any disturbance or damage to utilities caused by the act or omission of the Contractor, whether or not such utilities are accurately marked either on the Plans or by the utility owner in the field, and whether or not there is concurrent active or passive negligence on the part of City and/or City Personnel, but excluding any such claims or liabilities arising from the sole active negligence or willful misconduct of City or City Personnel. All claims and liabilities for which the Contractor is responsible pursuant to this paragraph are sometimes referred to herein as "Utility Damage Claims."

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

a) Furnish and install a 2-inch (50 mm) cushion of expansion joint material or other similar resilient material; or

b) Provide a sleeve or other opening which will result in a 2-inch (50 mm) minimum-clear annular space between the concrete and the utility; or

c) Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for a structure which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other

cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer, shall arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system, and shall implement such procedures at the Contractor's expense.

5-4 RELOCATION. *DELETE in their entirety 2nd and 3rd paragraphs and SUBSTITUTE with the following:*
If utilities are found to interfere with the Work after award of the Contract, such utilities will be rearranged by the respective utility owners, or the Engineer may order the Contractor to perform such rearrangement, as an addition to the Work in accordance with Section 3. Alternatively, the Engineer may order changes in the Work to avoid such interference, in accordance with Section 3. All work by the Contractor on utilities shall be done to the reasonable satisfaction of the utility owner as well as complying with the requirements of the Contract Documents.

When the Plans or Special Provisions provide for the Contractor to rearrange a utility as part of the Work, all costs for such work shall be considered included in the Bid for the items of work necessitating such work. However, if an underground main or trunk line utility to be rearranged by the Contractor is misidentified in the Plans, any additional cost incurred by the Contractor for such work resulting from the misidentification shall be treated as an addition to the Work in accordance with Section 3, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. Except as provided in this paragraph, the Contractor shall not be entitled to any additional compensation on account of inaccuracies in the Plans with respect to rearrangements of utilities that are included in the Work.

Temporary or permanent rearrangement of utilities requested by the Contractor for its convenience shall be its responsibility and the Contractor shall make all arrangements necessary for such work and bear all related costs. The Contractor shall not be entitled to any additional compensation on account of any such utilities or work.

ADD the following at the beginning of the last paragraph:

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Special Provisions provide for the Contractor to rearrange any service connections, such work is considered included in the Bid for the items of work necessitating such work.

5-5 DELAYS. *DELETE in its entirety and SUBSTITUTE with the following:*
The construction schedule developed in accordance with 6-1 shall allow adequate time for the necessary protection, removal and rearrangement of utilities by either the utility owner or the Contractor, as applicable. For work to be performed by a utility owner, the construction schedule shall allow for the time period required by the utility owner for such work. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or rearrangement of utilities, and shall obtain the Engineer's approval of such changes.

The Contractor will not be entitled to any extensions of the Contract time or compensation for damages incurred due to delays attributable to utilities at the site of the Work except as

otherwise provided in 6-6.1 or as provided below. Delays described below will not be considered delays for which the City is responsible within the meaning of 6-6.3.

a) Subject to 6-6.2 and 6-6.4, the Contractor shall be entitled to an extension of the Contract time to the extent that any delay in the Work is directly attributable to an unidentified underground main or trunk line utility or the misidentification of an underground main or trunk line utility in the Plans, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. If the Contractor is entitled to such a time extension, the Contractor also shall be entitled to compensation for idle time of equipment on account of such delay, determined by the Engineer in the same manner as determinations are made for equipment used in the performance of Extra Work in accordance with Section 3. The Contractor shall not be entitled to any other compensation or damages on account of such delay.

b) The Contractor may be given an extension of time (but no additional compensation) for unforeseen delays attributable to failure of a utility owner to complete utility rearrangement work within the time period reasonably scheduled for such work in the construction schedule, or to timely complete utility rearrangement work which the Contract Documents indicate will be completed in advance of the Contractor's construction operations.

The Contractor shall not be entitled to any time extension or additional compensation for any delays or losses described in 5-5: (a) to the extent resulting from the Contractor’s actions or omissions or which could have been avoided by any reasonable means, such as the judicious handling of forces, equipment or plant, or (b) arising in connection with utilities being rearranged for the Contractor's convenience. The determination of what damages the Contractor could have avoided will be made by the Engineer.

The Contractor shall immediately notify the Engineer of any delays to the Contractor's operations described in 5-5. Delays described in 5-5 are not considered right of way delays within the scope of 2-8.

ADD:

5-7 CONTRACTOR RESPONSIBILITIES.

The Contractor shall:

a) Cooperate with utility personnel; provide access to work site.

b) Coordinate Work of the Contract with affected utilities. All USA markings shall be removed after completion of the work for which the markings were provided, and before Agency’s Acceptance and/or approval of the Work.

c) Asphalt concrete pavement not overlaid or slurry sealed as part of the project bid items which is damaged by trenching, potholing or where the contractor otherwise damages pavement shall be slurry sealed after the pavement section is repaired. “Perpendicular” street cuts shall be slurry sealed ten (10) feet each side of the cut and for “longitudinal” cuts shall be slurry sealed from pavement lane to pavement lane line for the entire damaged area or as directed by the Agency Representative. Type I slurry shall be used on non-arterial streets and

Type II slurry shall be used on arterial streets. Damaged traffic striping, legends and markers shall also be replaced if damaged. “Patchwork” application of slurry shall be avoided by joining closely grouped areas of slurry applications. Compensation for this requirement shall be considered as included in the prices paid for the related items of work and no additional compensation will be allowed therefor.

ADD:

5-8 PERMANENT UTILITIES. Contractor shall contact and make all arrangements with utility owners and coordinate all provisions for installation and connection of all permanent utilities that are necessary for the Work, such as, but not limited to, natural gas, electricity, water, sewer, and telephone. All costs for such installation and connection, as well as costs for operating permanent utilities prior to acceptance of the Work by the Agency, shall be considered as included in the prices in the Bid for the related items of work.

5-8.1 UTILITY CONTACT & CONSTRUCTION TABLE.

Utility Company	Contact/Phone	Estimated Construction Window / Duration in Working Days[1]	Work Description Includes But Is Not Limited To:
Southern California Edison - Service Planner	Shara Farris 949-458-4437 Cell 909-543-8038	**60 WD**	BURD relocation, false curb installation, street light, traffic signal, meter relocations and pedestal relocations
Southern California Edison - Inspector	Louis Acosta 949-458-4574	**30 WD**	Irrigation meter, street light and traffic signal inspection
Irvine Ranch Water District (Water and Sewer)	Jeff Smyth 949-453.5751	**45 WD**	Install or relocate cathodic protection test stations, fire hydrant, blow off, air release. Adjust to grade existing valves
Southern California Gas Company	Ronan Lansang 714-634-5017	**20 WD**	Adjust to grade gas valve frames and covers
Cox Communication	Rey Castro 949-546-2466	**20 WD**	Relocation of existing meters, pull boxes and pedestals

[1] Note: Working days include multiple mobilizations.

Utility Company	Contact/Phone	Estimated Construction Window / Duration in Working Days[1]	Work Description Includes But Is Not Limited To:
AT&T	Craig Akin 714-666-5698	**20 WD**	Adjust to grade manholes and install false curbs at existing vaults
OCTA (Stops and Zones)	Bill Batory 714-560-5912	**10 WD**	Bus stop reconstruction at Campus and University
UCI Transportation & Distribution Services	Kevin Tobin 949-824-0967	**10 WD**	Any work affecting bus operations

The construction durations listed represent total accumulated time for the installation of the utilities. It is anticipated that each utility will require several mobilizations to complete their work in conjunction with the Contractor's operations. The following additional information is provided to facilitate coordination between the Contractor and each respective utility company:

a) AT&T CALIFORNIA SUBSTRUCTURE DESK - TELEPHONE AND COMMUNICATION

AT&T has facilities within the project limits. The Contractor shall coordinate and schedule AT&T to adjust to grade of existing telephone manholes and install false curb at existing vault locations as shown on the project drawings. Contractor shall coordinate with AT&T on protecting their existing facilities. If the existing facilities are determined to require adjustments, the Contractor shall coordinate with AT&T for the adjustment of these existing AT&T facilities. The Contractor shall provide the utility company and its contractor time and working space for this work.

b) COX COMMUNICATIONS – CABLE TELEVISION AND COMMUNICATIONS

COX has facilities within the project limits. The Contractor shall coordinate and schedule COX relocation of existing meters, pull boxes and pedestals as shown on the project drawings. Contractor shall coordinate with COX on protecting their existing facilities. If the existing facilities are determined to require adjustments, the Contractor shall coordinate with COX for the adjustment of these existing COX facilities. The Contractor shall provide the utility company and its contractor time and working space for this work.

c) IRVINE RANCH WATER DISTRICT (IRWD)

If awarded the IRWD utility alternate bid item work, the Contractor shall perform the adjustments as shown on the Plans and Special Provisions and IRWD requirements. Contractor shall coordinate and schedule IRWD inspections. If not awarded, the Contractor shall coordinate and schedule IRWD relocation of existing cathodic protection stations, pull boxes, hydrants, blow off and air release facilities and adjust existing valves to grade as shown on the project drawings. Contractor shall coordinate with IRWD on protecting their existing

facilities. If the existing facilities are determined to require adjustments, the Contractor shall coordinate with IRWD for the adjustment of these existing IRWD facilities. The Contractor shall provide the utility company and its contractor time and working space for this work.

d) SOUTHERN CALIFORNIA GAS COMPANY (SCG)

SCG has facilities within the project limits that are to be protected-in-place. Contractor shall coordinate with SCG on protecting their existing facilities. Protect-in-place all SCG gas lines in the roadway in the center median along University Drive and in the roadway on Campus Drive and Mesa Road. If the existing facilities are determined to require adjustments, the Contractor shall coordinate with SCG for the adjustment of these existing SCG facilities. The Contractor shall provide the utility company and its contractor time and working space for this work.

e) SOUTHERN CALIFORNIA EDISON (SCE) – ELECTRICAL SERVICE PROVIDER

Contractor shall construct Southern California Edison (SCE) facilities including, but not limited to, street light conduit and pull boxes as shown on the project drawings and per SCE requirements. The Contractor shall coordinate and schedule SCE inspections, SCE construction of street light foundation installation, cable installation, “make-up” connections/disconnections, energizing/de-energizing system and pole and fixture relocations. The Contractor shall relocate SCE street light conduit interfering with installation of new street light foundations.

SCE has facilities within the project limits that are to be protected-in-place. Contractor shall coordinate with SCE on protecting their existing facilities. If the existing facilities are determined to require adjustments, the Contractor shall coordinate with SCE for the adjustment of these existing SCE facilities. The Contractor shall provide the utility company and its contractor time and working space for this work.

Contractor shall coordinate with SCE for existing service disconnect and reconnect needs, for the relocation of existing meters and street lighting (pole, fixtures, etc.) and installation of false curbs at existing vaults as shown on the plans. SCE will make wiring connections in the handhole and relocate the existing meters. The Contractor shall coordinate and arrange for this work with SCE.

f) OCTA

OCTA operates bus stops within the project limits. At least two weeks prior to starting work, the Contractor shall notify the Orange County Transportation Authority bus service of the approximate starting date and completion date. The Contractor shall maintain an area during construction for the pick-up and drop-off of passengers. Contractor shall coordinate all work affecting bus stop operations with OCTA.

g) UCI TRANSPORTATION & DISTRIBUTION SERVICES

UCI operates shuttle routes within the project limits. The Contractor shall coordinate with UCI and adhere to the requirements of Section 601-6.6.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

REVISE as follows:

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall begin the Work on or before the date stipulated in the Notice to Proceed and shall diligently prosecute the Contract to completion within the time limit provided in the Contract.

The Contractor shall notify the Agency Representative of his intent to begin work at least two (2) Working Days prior to the start of any work.

The Contractor may, upon written approval from the Agency, begin work in advance of the date in the Notice to Proceed; however, **no work shall be started in advance of the completed execution of the Contract and approval of the construction progress schedule by the Agency**. The Agency may, but shall not be required to, provide access to the site prior to the date specified in the Notice to Proceed.

6-1.1 General. Within ten (10) days after the date of the City's execution of the Contract, the Contractor shall submit a proposed construction schedule to the Engineer for approval. The construction schedule shall be in accordance with 6-1.2 and 6-1.3 and shall be in sufficient detail to show chronological relationship of all activities of the Work. These include, but are not limited to, estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, utility relocation efforts, procurement of materials and scheduling of equipment.

Prior to issuing the Notice to Proceed, the Engineer will schedule a Pre-Construction Meeting with the Contractor to review the proposed construction schedule and delivery dates, arrange utility coordination and clarify inspection procedures.

Notwithstanding any other provisions of the contract, the Contractor shall not be obligated to perform any work and the City shall not be obligated to accept or pay for any work performed by the Contractor prior to delivery of the Notice to Proceed. The City's knowledge of work performed prior to the delivery of the Notice to Proceed shall not obligate the City to accept or pay for such work. The Contractor shall provide the required contract bonds and evidences of insurance prior to commencing work at the site.

6-1.2 Definitions. The following definitions shall apply to this section:

a) ACTIVITY — a task, event or other project element on a schedule that contributes to completing the project. Activities have a description, start date, finish date, duration and one or more logic ties.

b) BASELINE SCHEDULE — the initial schedule representing the Contractor's work plan on the first working day of the project.

c) CONTRACT COMPLETION DATE — the current extended date for completion of the contract shown on the Weekly Statement of Working Days furnished by the Engineer in conformance with the provisions in 6-7.

d) CRITICAL PATH — the longest continuous chain of activities for the project that has the least amount of total float of all chains. In general, a delay on the critical path will extend the scheduled completion date.

e) CRITICAL PATH METHOD (CPM) — a network based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project.

f) DATA DATE — the day after the date through which a schedule is current. Everything occurring earlier than the data date is “as-built” and everything on or after the data date is “planned.”

g) FLOAT — the difference between the earliest and latest allowable start or finish times for an activity.

h) FRAGNET — a fragnet is defined as the sequence of new activities that are proposed to be added to the existing schedule, to demonstrate either added scope, or a change and the corresponding impact. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities.

i) MILESTONE — an event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.

j) NEAR CRITICAL PATH — a chain of activities with total float exceeding that of the critical path but having no more than ten (10) Working Days of total float.

k) SCHEDULED COMPLETION DATE — the planned project finish date shown on the current accepted schedule.

l) TOTAL FLOAT — the amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.

m) UPDATE SCHEDULE — a current schedule developed from the baseline or subsequent schedule through regular monthly review to incorporate as-built progress and any planned changes.

6-1.3 General Requirements. The Contractor shall meet with the Engineer on a date mutually agreed by the parties with the intent of discussing the schedule requirements. This meeting shall happen before the Contractor begins the work on the Baseline schedule.

The Contractor shall submit to the Engineer baseline, monthly update, look-ahead schedules and final update schedules, each consistent in all respects with the time and order of work requirements of the contract. The project work shall be executed in the sequence indicated on the current accepted schedule.

Schedules shall show the order in which the Contractor proposes to carry out the work with logical links between time-scaled work activities and calculations made using the critical path method to determine the controlling operation or operations. The Contractor is responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

The Contractor shall produce schedules using computer software and shall furnish compatible software for the Engineer's exclusive possession and use. The Contractor shall furnish network diagrams and schedule data as parts of each schedule submittal.

The schedule shall be prepared using the latest version of Oracle's Primavera P6 scheduling tool or approved equal. Any tool other than Primavera shall first require approval from the Engineer.

The Contractor shall not sequester float through strategies such as extending activity duration estimates to consume available float, using preferential logic, using extensive crew/resource constraints, using special lead/lag logic restraints, using imposed dates or other float suppression techniques.

Schedules shall include, but not be limited to, applicable activities that show the following:

a) Project characteristics, salient features, or interfaces, including those with outside entities that could affect time of completion.

b) Project start date, scheduled completion date and other milestones.

c) Work performed by the Contractor, subcontractors and suppliers.

d) Submittal development, delivery, review and approval, including those from the Contractor, subcontractors and suppliers.

e) Procurement, delivery, installation and testing of materials, plants and equipment.

f) Testing and settlement periods.

g) Utility notification and relocation.

h) Erection and removal of false work and shoring.

i) Lane closures, ramp closures, etc.

j) Major traffic stage switches.

k) Finishing roadway and final cleanup.

l) Schedule shall further include the following:

    1) A clear and legible description for each activity.

    2) A detailed Work Breakdown Structure (WBS) or Activity Coding Structure, sufficient to clearly organize, sort and filter activities as needed.

    3) A duration of not less than one (1) Working Day, except for event activities, and not more than twenty (20) Working Days, unless otherwise authorized by the Engineer.

    4) At least one predecessor and one successor activity, except for project start and finish milestones.

    5) Required constraints.

The Engineer's review and acceptance of schedules shall not waive any contract requirements and shall not relieve the Contractor of any obligation thereunder or responsibility for submitting complete and accurate information. Schedules that are rejected shall be corrected by the Contractor and resubmitted to the Engineer within five (5) Working Days of notification by the Engineer, at which time a new review period of one week will begin.

Errors or omissions on schedules shall not relieve the Contractor from finishing all work within the time limit specified for completion of the contract. If, after a schedule has been accepted by the Engineer, either the Contractor or the Engineer discover that any aspect of the schedule has an error or omission, it shall be corrected by the Contractor on the next update schedule.

The Contractor shall include the following for each schedule submittal:

a) Two sets of originally plotted, time-scaled network diagrams.

b) Two copies of a narrative report.

c) Two copies of each of three (3) sorts of the CPM software-generated tabular reports.

d) Electronic copy of the schedule data.

The time-scaled network diagrams shall conform to the following:

a) Show a continuous flow of information from left to right.

b) Be based on early start and early finish dates of activities.

c) Clearly show the primary paths of criticality using graphical presentation.

d) Include a title block and a timeline on each page.

Tabular reports shall be software-generated and provide information for each activity included in the project schedule. Three different reports shall be sorted by (1) activity ID, (2) early start and (3) total float. Tabular reports shall be 8 ½" x 11" in size and shall include, as a minimum, the following applicable information:

a) Data date

b) Activity number and description

c) Predecessor and successor activity and numbers and descriptions

d) Activity codes

e) Scheduled, or actual and remaining durations (work days) for each activity

f) Earliest start (calendar) date

g) Earliest finish (calendar) date

h) Actual start (calendar) date

i) Actual finish (calendar) date

j) Latest start (calendar) date

k) Latest finish (calendar) date

l) Free float (working days)

m) Total float (working days)

n) Percentage of activity completed and remaining duration for incomplete activities

o) Lags

p) Required constraints

Schedule submittals will only be considered complete when all documents and data have been provided as described above.

6-1.4 Computer Software. The software shall be the current version of Oracle's Primavera P6 for Windows or equal. If the Contractor proposes to use a different software than Primavera, the Contractor shall submit to the Engineer for approval a description of proposed software. All software shall be compatible with the latest Windows operating system.

The Contractor shall furnish schedule software and all original software instruction manuals to the Engineer with submittal of the baseline schedule. The furnished schedule software will be returned to the Contractor upon Project Acceptance.

The Contractor shall instruct the Engineer in the use of the software and provide software support until the contract is accepted. Within twenty (20) Working Days of approval of the Contract, the Contractor shall provide a commercial 16-hour training session and training manuals for 3 City employees in the use of the software at a location acceptable to the Engineer. It is recommended that the Contractor also send at least 3 employees to the same training session to facilitate development of similar knowledge and skills in the use of the software.

6-1.5 Schedule Submittals, Network Diagrams and Reports.
The Contractor shall:

a) Submit the Baseline Schedule within twenty (20) Working Days after the approval of the Contract. Review 6-1.6 for more details on the Baseline Schedule requirements.

b) Contractor shall incorporate any revisions deemed necessary by the City after the City's review of the Baseline Schedule.

c) Once the City approves the Baseline Schedule, the Contractor shall submit two (2) color plots on "E" size sheets (approximately 34" x 44") of each required schedule, four (4) copies of the schedule in 11" x 17" format. A computer copy of the schedule data in the native file format should also be presented.

d) Submit the Monthly Updated Schedules and reports along with the computer copy of the schedule file, on or within the first working day of each month. The Monthly Updated Schedule shall incorporate the Project's actual progress (or as-built information) as of the data date indicated on the update into the Baseline Schedule or the latest monthly update as appropriate.

e) Submit a 3-Week Look-Ahead Schedule weekly and at every progress meeting during construction.

f) Submit Final As-Built Schedule upon completion of the entire Project.

6-1.6 Baseline Schedule. The Contractor shall submit to the Engineer a baseline schedule within ten (10) days after the date of the City's execution of the Contract. The Contractor shall allow three (3) weeks for the Engineer's review after the baseline schedule and all support data are submitted. Beginning the week the baseline schedule is first submitted, the Contractor shall meet with the Engineer weekly to discuss and resolve schedule issues until the baseline schedule is accepted.
The baseline schedule shall include the entire scope of work and shall show how the Contractor plans to complete all work contemplated. The baseline schedule shall clearly identify the activities that define the critical path. Multiple critical paths and near-critical

paths shall be kept to a minimum. Not more than 30 percent of the baseline schedule activities shall be critical or near critical, unless otherwise authorized by the Engineer. The baseline schedule shall not extend beyond the number of Working Days originally provided in these Special Provisions. The baseline schedule shall have a data date of the first working day of the contract and not include any completed work to date. The baseline schedule shall not attribute negative float or negative lag to any activity.

Each baseline schedule submittal shall include the following:

a) A Baseline Narrative report which must include the following information:
    1) Explanation of the Contractor's general approach to this project and an explanation of what the Contractor considers as key factors to successfully complete the project within the contractual time.
    2) A brief explanation of where the work will begin and the how the work and crews will flow through the project.
    3) Describe how the Agency's jurisdictional requirements regarding working times and lane closures have been factored in the schedule.
    4) A general explanation of the anticipated workdays per week, number of shifts per day, number of hours per shift, and holidays observed.
    5) A description of problems, risks or issues anticipated.
    6) Typical crew sizes and major equipment to be used in the job.
    7) Long lead items.
b) Hard copy of the schedule in 11" x 17" format.
c) Color plots in "E" sheet (Approximately 34" x 44".)

6-1.7 Update Schedule. The Contractor shall submit an update schedule and meet with the Engineer to review contract progress, on or before the first day of each month, beginning one month after the baseline schedule is accepted. The Contractor shall allow two (2) weeks for the Engineer's review after the update schedule and all support data are submitted, except that the review period shall not start until any previous month's required schedule is accepted. Update schedules that are not accepted or rejected within the review period will be considered accepted by the Engineer.

The update schedule shall have a data date of the last date of the reporting period month or other date established by the Engineer. The update schedule shall show the status of work actually completed to date and the work yet to be performed as planned. The following shall be included with each monthly update:

a) The electronic copy of the schedule file in the native file format.
b) Hard copies of the schedule in 11" x 17" format and color plots in "E" sheet size.
c) A critical path report, showing only the longest path in the project.
d) A list and detailed description of all changes made to the schedule.
e) A narrative report. The narrative report shall be organized in the following sequence with all applicable documents included:
    1) Contractor's transmittal letter.

2) Work completed during the period.
3) Identification of unusual conditions or restrictions regarding labor, equipment or material; including multiple shifts, 6-day work weeks, specified overtime or work at times other than days or hours.
4) Description of the critical path method.
5) Changes to the critical path and scheduled completion date since the last schedule submittal.
6) Description of the problem areas.
7) Current and anticipated delays:
    (a) Cause of Delay.
    (b) Impacts of delay on other activities, milestones and completion dates.
    (c) Corrective action and schedule adjustments to correct the delay.
8) Pending Items and status thereof:
    (a) Permits
    (b) Change Orders
    (c) Time adjustments
    (d) Non-compliance notices
9) Reasons for an early or late schedule completion date in comparison to the contract completion date.

6-1.8 Look-Ahead Schedule. The Contractor shall prepare and issue a 3-Week Look Ahead schedule to provide a more detailed day-to-day plan of upcoming work identified on the Baseline/Monthly Update. Each task in the Look Ahead Schedule shall be referenced back to a relevant Activity ID on the Master Schedule (Either the Baseline or the latest Monthly Update). Activities shall not exceed five (5) Working Days in duration and have sufficient level of detail to assign crews, tools and equipment required to complete the work. The Contractor shall update this schedule weekly.

6-1.9 Time Impact Analysis (TIA). The Contractor shall submit a written TIA to the Engineer with each request for adjustment of contract time, or when the Contractor or Engineer consider that an approved or anticipated change may impact the critical path or contract progress. The Contractor shall submit the TIA for review within ten (10) Working Days after the date of the alleged delay impact to the schedule or within ten (10) Working Days after receiving a written request for TIA from the Engineer. Delays of any non-critical Work shall not be the basis for an extension of Contract time until the delays consume the float associated with that non-critical work activity and cause the work activity to become critical The City will not grant time extensions unless substantiated by the CPM Schedule, and then not until the project float becomes zero. If the Contractor fails to submit a TIA within the aforementioned time specified, then the City shall deem the Contractor to have agreed that there is no time impact and that the Contractor has irrevocably waived its rights to any additional Contract time.

For each TIA the Contractor shall provide information justifying the request and stating the extent of the adjustment requested for each specific change or alleged delay. Each TIA shall be in a form and content suitable to the Engineer and include the following:

a) The TIA shall illustrate the impacts of each change or delay on the current schedule completion date or internal milestones, as appropriate.

b) The TIA shall include a written narrative. The narrative shall detail the proposed methodology for creating the Fragnet, include a chronology of events leading to the delay, and an explanation of how the delay impacted the critical path.

c) The analysis shall use the accepted schedule that has a data date closest to and prior to the event. If the Engineer determines that the accepted schedule used does not appropriately represent the conditions prior to the event, the accepted schedule shall be updated to the day before the event being analyzed.

d) The TIA shall include an impact schedule developed from incorporating the event into the accepted schedule by adding or deleting activities, or by changing durations or logic of existing activities. If the impact schedule shows that incorporating the event modifies the critical path and completion date of the accepted schedule, the difference between schedule completion dates of the two schedules shall be equal to the adjustment of Contract time. The Engineer may construct and utilize an appropriate project schedule or other recognized method to determine adjustments in Contract time until the Contractor provides the TIA.

The Contractor shall allow the Engineer 2 weeks after receipt to approve or reject the submitted TIA. If the TIA is accepted, the contract completion time shall be adjusted accordingly. All approved TIA schedule changes shall be shown on the next update schedule.

If the TIA submitted by the Contractor is rejected by the Engineer, the Contractor shall meet with the Engineer to discuss and resolve issues related to the TIA. If agreement is not reached, the Contractor will be allowed 15 days from the meeting with the Engineer to give notice in conformance with the provisions in Section 3. The Contractor shall only show actual as-built work, not unapproved changes related to the TIA, in subsequent update in schedules. If agreement is reached at a later date, approved schedule changes shall be shown on the next update schedule.

6-1.10 Final Update Schedule. The Contractor shall submit a final update, as-built schedule with actual start and finish dates for the activities, within thirty (30) Calendar Days after completion of the Work. The Contractor shall provide a written certificate with this submittal signed by the Contractor's project manager and an officer of the company stating, “To my knowledge and belief, the enclosed final update schedule reflects the actual start and finish dates of the actual activities for the project contained herein.” An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager.

6-1.11 Retention. The City will retain an amount equal to 25 percent of the estimated value of the Work performed during each estimate period in which the Contractor fails to submit an acceptable schedule conforming to the requirements of these Special Provisions as determined by the Engineer. Schedule retentions will be released for payment on the next monthly estimate for partial payment following the date that acceptable schedules are submitted to the Engineer or as otherwise specified herein.

Upon completion of all contract work and submittal of the final update schedule and certification, any remaining retained funds associated with this section, “Progress Schedule (Critical Path Method),” will be released for payment. Retentions held in conformance with this section shall be in addition to other retentions provided for in the contract. No interest will be due the Contractor on retention amounts.

6-1.12 Payment. Payment for Construction Schedule (critical path method) shall be at the contract unit price per Lump Sum and shall include full compensation for furnishing all labor, materials, equipment, and incidentals, including computer software, and for doing all the work involved in preparing, furnishing, and updating schedules, and instructing and assisting the Engineer in the use of computer software, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

Payment for the construction schedule (critical path method) contract item will be made progressively as follows:

a) A total of 25 percent of the item amount will be paid upon achieving all of the following:
    1) Completion of 5 percent of all contract item work.
    2) Software training for Agency staff.
    3) Acceptance of all schedules and any time impact analyses required at the time 5 percent of all contract item work is complete.
b) A total of 50 percent of the item amount will be paid upon completion of 25 percent of all contract item work and acceptance of all schedules and time impact analyses required at the time 25 percent of all contract item work is complete.
c) A total of 75 percent of the item amount will be paid upon completion of 50 percent of all contract item work and acceptance of all schedules and time impact analyses required at the time 50 percent of all contract item work is complete.
d) A total of 100 percent of the item amount will be paid upon completion of all percent of all contract item work and acceptance of all schedules and time impact analyses required at the time all percent of all contract item work is complete, and submittal of the certified final update schedule.

If the Contractor fails to complete any of the work or provide any of the schedules required by this section, the Engineer shall make an adjustment in the compensation in conformance with the provisions in Section 3 “Changes of Work,” of the Standard Specifications for the work not performed. Adjustments in compensation for schedules will not be made for any increased or decreased work ordered by the Engineer in furnishing schedules.

Should the Contractor fail to meet the requirements under 6-1 of these Special Provisions, the Engineer reserves the right to withhold payment for work being performed. Furthermore, if after notice is given to the Contractor to perform work to meet these requirements, and the Contractor refuses or for any reason fails to perform sufficiently to meet these schedules, City may withhold or deny payment for work being performed.

6-2 PROSECUTION OF THE WORK.

ADD:

6-2.1 Time of Completion and Forfeiture Due to Delay. The Contractor shall complete the Work called for under the Contract within the time set forth in the Special Provisions.

In accordance with Government Code § 53069.85, Contractor agrees to forfeit and pay to the Agency the amount per day set forth in the Contract for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Agency has endeavored to identify all areas of the site which may contain hazardous waste, as defined by Health and Safety Code § 25117, and unless otherwise noted said hazardous waste in these areas has been mitigated. However, the parties expressly acknowledge the possibility of the existence of further hazardous waste not previously identified. If, during the course of his work, the Contractor encounters any such hazardous waste, he shall promptly notify the Agency through its designated representative. If the material is indeed “hazardous waste” pursuant to Health and Safety Code § 25117, the Agency has the option to have the mitigation work performed by the Contractor or by a separate contract from the work being performed. If the Contractor performs said mitigation work, the cost will be paid for as an addition to the work in accordance with Section 3. To the maximum extent permitted by law, the Agency shall not be liable for any damages beyond an appropriate time extension for delays occasioned by the existence of hazardous waste conditions contemplated herein.

No forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor (including but not restricted to acts of nature or of the public enemy, acts of the government, acts of the Agency, or acts of another contractor in the performance of a contract with the Agency, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather). Any such delays, except for acts of the Agency, shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be an extension of time obtained in accordance with this section.

The Contractor shall, within ten (10) Calendar Days from the beginning of any such delay, notify the Agency Representative in writing of the cause of delay, whereupon the Agency Representative will ascertain the facts and extent of the delay and extend the time for completing the Work if, in his judgment, the findings of the fact justify such an extension, and the Agency Representative’s findings of facts thereon shall be final and conclusive.

ADD:

6-2.2 Order of Work Requirements. When required by these Special Provisions or the Plans, the Contractor shall follow the sequence of operations and restrictions as set forth therein.

The Work shall be performed in conformance with the staging of construction shown on the Plans and indicated below. Subject to approval by the Engineer, non-conflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction. The Engineer's approval of any Contractor-requested modifications to the order of work or staging of the work shall not be grounds for a Change Order request or time extension request by the Contractor. If the Contractor deviates from the specified order of work or the staging plans, it does so at its own risk and shall assume all time impacts and cost associated with such deviations.

The order of work described below is not intended to include all work items necessary to complete a particular construction stage and serves to only summarize the order of major work items.

General:

a) The Contractor shall order traffic signal equipment and any other long lead-time materials. The Contractor shall furnish the Engineer a statement from each vendor, confirming that the material orders were received and accepted by the vendor.

b) The Contractor shall contact all utilities affected by the project and initiate utility coordination/relocations.

c) The Contractor shall develop the construction schedule and submit to the Engineer for review and approval.

d) The Contractor shall submit the WPCP approval and install water pollution prevention devices as required per section 7-8.6 "Water Pollution Control" of these Special Provisions.

e) USA and pothole to locate existing utilities.

Phase 1 – Median Removal and Temporary Pavement Construction

a) Coordinate with SCE to remove median street light facilities

b) Remove median trees

c) Remove existing median

d) Construct temporary paving to be used for Phase 2 traffic

e) Install temporary lighting

Phase 2 – Widening and Parkway Improvement Construction

a) Perform phase 2 removals and relocations

b) Install new catch basins, Filterra boxes and storm drain pipe

c) Construct curb & gutter, sidewalk, retaining walls and utility relocations

d) Traffic signal facility installation

e) Construct San Diego Creek bike path improvements

f) Construct new pavement section, outside lanes

Phase 3 – Median and Inside Lane Construction

a. Construct median curb & gutter
b. Coordinate with SCE to install new street lights
c. Construct new pavement section, inside lanes

Phase 4 – AC, Landscape, Irrigation, Signing/Striping and Final Utility Adjustments Installation

a) Final AC wearing course installation
b) Landscape improvements
c) Adjust utilities to finish grade
d) Install ultimate striping and signage

6-3 SUSPENSION OF THE WORK.

6-3.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
The Engineer shall have the authority to suspend the Work wholly or in part, for any time period as the Engineer deems necessary in the interest of Agency, for Agency's convenience, or due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed as ordered or approved in writing by the Engineer.

Resumption of work shall be predicated on receipt of the following from the Contractor:

a) A revised schedule showing each task yet to be accomplished and the time line to accomplish each – until final completion.
b) The work force projections attached to each task listed per workweek.
c) The cost expenditures attached to each task summarized per each workweek.
d) Lien releases from each subcontractor, supplier, and vendor to which the Contractor has requested materials, equipment or any other service recognizing the payments received.
e) An Income and Expense Statement projecting how the Contractor will finance the reminder of the project.

Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3. For purposes of 6-6.3, delays resulting from suspensions ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract, shall not be delays for which the Agency is responsible.

In the event that a suspension of Work is ordered as provided above, the Contractor, at the Contractor's expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of that suspension as provided in 7-10, and as specified in these Special Provisions. In the event that the Contractor fails to perform the work above specified, the Agency will perform that work and, if the suspension is due to Contractor's failure to carry out orders given or to perform any provision of the Contract, the cost thereof will be deducted from monies due or to become due the Contractor.

If a suspension of work is ordered by the Engineer, in accordance with this subsection, the days on which the suspension order is in effect shall be considered working days if those days are working days within the meaning of the definition set forth in 6-7.2.

The suspension of Work shall not relieve the Contractor of the responsibilities as set forth in the Contract Documents.

6-4 TERMINATION OF THE CONTRACT FOR DEFAULT. *ADD the following:*
In the event this Contract is terminated for grounds which are later determined not to justify a termination for breach, such termination shall be deemed to constitute a Termination of the Contract for Convenience pursuant to 6-5.

6-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency reserves the right to terminate the Contract at any time upon a determination by the Engineer that termination of the Contract is in the best interest of the Agency.

If the Agency elects to terminate the Contract, the termination of the Contract and the total compensation payable to the Contractor shall be governed by the following:

a) The Engineer will issue the Contractor a signed written notice, specifying that the Contract is to be terminated. Upon termination of the Contract, the Contractor will be relieved of further responsibility for damage to the Work (excluding materials) as specified in 4-1.2 of the Standard Specifications, 7-16 of these Special Provisions and, except as otherwise directed in writing by the Engineer, the Contractor shall:

    1) Stop all work under the Contract except that specifically directed to be completed prior to Acceptance.
    2) Perform work the Engineer deems necessary to secure the project for termination.
    3) Remove equipment and plant from the site of the Work.
    4) Take action that is necessary to protect materials from damage.
    5) Notify all subcontractors and suppliers that the Contract is being terminated and that their contracts or orders are not to be further performed unless otherwise authorized in writing by the Engineer.
    6) Provide the Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the Work and not yet used in the Work, including its storage location, and such other information as the Engineer may request.
    7) Dispose of materials not yet used in the Work as directed by the Engineer. It shall be the Contractor's responsibility to provide the Agency with good title to all materials purchased by the Agency hereunder, including materials for which partial payment has been made as provided in 9-3.2 and with bills of sale or other documents of title for those materials.
    8) Subject to the prior written approval of the Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials

terminated hereunder. To the extent directed by the Engineer, the Contractor shall assign to the Agency all the right, title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.

9) Furnish the Engineer with the documentation required to be furnished by the Contractor under the provisions of the Contract including, on projects as to which Federal funds are involved, all documentation required under the Federal requirements included in the Contract.

10) Take other actions directed by the Engineer.

b) Acceptance of the contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials. The Contractor shall continue to be responsible for damage to materials after issuance of the Notice of Termination, except as follows:

1) The Contractor's responsibility for damage to materials for which partial payment has been made as provided in 9-3.2 and for materials furnished by the Agency for use in the Work and unused shall terminate when the Engineer certifies that those materials have been stored in the manner and at the locations the Engineer has directed.

2) The Contractor's responsibility for damage to materials purchased by the Agency subsequent to the issuance of the notice that the Contract is to be terminated shall terminate when title and delivery of those materials has been taken by the Agency.

When the Engineer determines that the Contractor has completed the Work under the Contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, the Engineer will formally accept the Contract, and immediately upon and after the acceptance by the Engineer, the Contractor will not be required to perform any further work thereon.

c) Termination of the Contract shall not relieve the surety of its obligation for any just claims arising out of the work performed.

d) Where Agency terminates the Contract for Agency’s convenience and not due to the fault of Contractor, the total compensation to be paid to the Contractor shall be determined by the Engineer based on the following:

1) The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. In determining the reasonable cost, deductions will be made for the cost of materials to be retained by the Contractor, amounts realized by the sale of materials, and for other appropriate credits against the cost of the work. When, in the opinion of the Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing that work in compliance with the requirements of the Plans and Specifications and the excessive actual cost shall be disallowed.

2) A reasonable allowance for profit on the cost of the work performed as determined under part (1) above, provided the Contractor establishes to

the satisfaction of the Engineer that it is reasonably probable that the Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed 4 percent of the cost.

3) The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the Agency or otherwise disposed of as directed by the Engineer.

4) A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the Contract.

All records of the Contractor and the Contractor's subcontractors, necessary to determine compensation in conformance with the provisions in this Section 6-5, shall be open to inspection or audit by representatives of the Agency at all times after issuance of the notice that the Contract is to be terminated and for a period of 3 years, thereafter, and those records shall be retained for that period.

After acceptance of the Work by the Agency, the Engineer may make payments on the basis of interim estimates pending issuance of the final estimate in conformance with the provisions in 9-3.2 and 9-4, when, in the Engineer's opinion, the amount thus paid, together with all amounts previously paid or allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the final estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the Contract.

THE PROVISIONS IN THIS SECTION 6-5 SHALL BE PHYSICALLY INCLUDED IN ALL SUBCONTRACTS.

6-6.2 Extension of Time. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may extend the time fixed for completion of the Work under the Contract from time to time. All applications for extensions of time shall be in writing and shall be filed with the Agency before the expiration of the original time fixed in the Contract or as previously extended.

An extension of time may be granted by the Agency after the expiration of the time originally fixed in the Contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration. Any extension of time shall not release the sureties upon any bond required under the Contract nor effect forfeitures due to delay.

No extension of time will be granted for delays that are not on the critical path.

6-8.1 Completion. *DELETE in its entirety and SUBSTITUTE with the following:*
When the Contractor considers the Work, or a designated portion of Work, if specified in the Contract Documents, is complete, the Contractor shall submit a written request to the Engineer for inspection. By submittal of such request, Contractor certifies that:

a) Contract Documents have been reviewed by the Contractor.

b) Work has been completed in accordance with Contract Documents and is ready for inspection.

c) Equipment and systems have been tested, adjusted/balanced and are fully operational.

The Contractor shall submit the request a minimum of five (5) Working Days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time during the Contract period to complete inspections and make any corrections. Each day beyond the time prescribed to complete the Contract will be subject to assessment of liquidated damages in accordance with 6-9.

Should Agency Representative's inspection find Work incomplete, Agency Representative will notify the Contractor in writing, listing observed deficiencies. The Contractor shall remedy listed deficiencies immediately and send a request for final inspection. Failure of the Contractor to remedy deficiencies may, at the Agency's option, result in reinspection(s) of the work to identify additional deficiencies, if any. Agency's costs associated with reinspection(s) are subject to provisions of 6-8.2.

When the Agency confirms Work is complete and, closeout submittals, as referred to in 6-8.3 have been provided, Agency Representative will notify Contractor of date of completion on the Weekly Statement of Working Days.

ADD:

6-8.4 Reinspections. Should status of completion of Work require reinspection(s) by Agency due to failure of the Contractor to make corrections on initial inspection, Agency may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

Inspections initiated at the request of the Agency will not be subject to provisions of this Subsection.

ADD:

6-8.5 Closeout Submittals.
Contractor shall submit:

a) Project Record Documents clearly marked with all changes to Plans within thirty (30) Calendar Days of Final Acceptance
b) Operation and Maintenance Data
c) Warranties and Bonds
d) Spare Parts and Maintenance Materials, as specified
e) Evidence of Payment and Release of Stop Payment Notices
f) Other data and materials as may be required in the Contract Documents

6-9 LIQUIDATED DAMAGES. *DELETE in its entirety and SUBSTITUTE with the following:*
Liquidated damages shall be as specified in the Contract.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

REVISE as follows:

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General. *MODIFY to ADD the following:*
The Contractor shall render its machinery and equipment inoperable at all times except during actual construction. The Contractor shall be responsible for construction means, controls, techniques, sequences, procedures and construction safety.

ADD:

7-1.1.1 Equipment. Contractor shall stencil or stamp at a clearly visible location on each piece of equipment, except hand tools, an identifying number and:

a) On compacting equipment, its make, model number, and empty gross weight that is either the manufacturer's rated weight or the scale weight.

b) On meters and on the load-receiving element and indicators of each scale, the make, model, serial number, and manufacturer's rated capacity.

The Contractor shall submit a list describing each piece of equipment and its identifying number before commencement of the Work.

Upon request, the Contractor shall submit manufacturer's information that designates portable vehicle scale capacities.

The Contractor's measuring devices shall be tested and approved under California Test 109 in the Agency's presence or by any of the following:

a) County Sealer of Weights and Measures

b) Certified Scale Service Agency

c) Division of Measurement Standards Official

7-1.2 Temporary Utility Services. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall, at its own expense, make all arrangements to furnish, install and maintain temporary water, electricity, telephone, and sanitary facilities for construction needs throughout construction period. Materials may be new or used, but must be adequate for the purposes intended, and must not violate requirements of applicable codes, specifications or standards.

The Contractor shall maintain systems to provide continuous services, modify, and extend services, as work progress requires. The Contractor shall completely remove temporary materials and equipment when construction needs can be met by use of permanent utility facilities.

The Contractor shall clean and repair damage caused by installation or use of temporary facilities, restore existing facilities used for temporary services to original or better condition, and restore permanent facilities used for temporary services to original condition.

For water, the Contractor shall:

a) Provide adequate supply of water suitable for construction usage and needs.

Water Source: Irvine Ranch Water District (IRWD)

a) Obtain meter, inspections and approvals prior to use of existing system.
b) Comply with IRWD requirements.

Conservation:

a) Minimize water use whenever possible.
b) Maintain watering equipment in good working order.
c) Repair leaks promptly.

When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

For electricity, the Contractor shall:

a) Provide portable power plants and/or connection to existing system for construction needs.
b) Source of existing power: Southern California Edison Company (SCE). Prior to connecting to existing system:
    1) Obtain permit from City of Irvine, Community Development Department for installation of temporary power pole and/or system.
    2) Arrange for required inspections and coordinate temporary meter installation with City and SCE.

For sanitary facilities, the Contractor shall:

a) Furnish and maintain portable toilet units in a clean, operable and sanitary condition for use by construction personnel.
b) Place units in conformance with applicable laws, codes and regulations.

Pay all fees and charges for applications, non-City permits and inspections, installations, temporary meters, utility usage, service charges, maintenance, removals and restoration.

Contractor shall use standard products of service companies. At Contractor's option with prior approval by the Agency, patented specialty devices may be used, when in compliance with applicable codes and service company requirements.

7-2.3 Payroll Records. *MODIFY to ADD the following:*
The Contractor and all its subcontractors shall submit to the City and the Labor Commissioner (Division of Labor Standards Enforcement) certified payroll records every Friday until Notice of Completion is filed and recorded.

7-3 INSURANCE.

7-3.1 General. *MODIFY to ADD the following:*
Without limiting Contractor's indemnification obligations, the Contractor shall not commence work until he procures and maintains, at his sole cost and for the duration of

this Contract, insurance coverage as provided below, against all claims for injuries against persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees, and/or subcontractors. In the event that Contractor subcontracts any portion of the Work in compliance with 2-3 of the Standard Specifications and Special Provisions, the Contract between the Contractor and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Contractor is required to maintain pursuant to 7-3.

Insurance policies shall be deemed not be in compliance if they include any limiting provision or endorsement that has not been submitted for approval in accordance with 7-3.

The Contractor's insurance shall be "occurrence" rather than "claims made" insurance, except for Professional Liability insurance, which may be for claims made and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

The insurance coverage required for General Liability, Automobile Liability and Contractor's Pollution Liability shall contain the following provisions or be endorsed to provide the following:

The Contractor shall name as additional insured the City of Irvine, Irvine Ranch Water District (IRWD), Newport Beach, Caltrans, University of California Irvine (UCI) and County of Orange, their elected officials, officers, employees, volunteers, boards and representatives shall be additional insured with regard to liability and defense of suits or claims arising out of the performance of the Contract.

Additional Insured Endorsements shall not:

a) Be limited to "Ongoing Operations"
b) Exclude "Contractual Liability"
c) Restrict coverage to the "Sole" liability of contractor
d) Contain any other exclusion contrary to the Contract

This insurance shall be primary and any other insurance, deductible, or self-insurance available to the insured added by endorsement shall be in excess of and shall not contribute with this insurance.

The Contractor shall immediately report all claims to its insurance carrier and acknowledge receipt within thirty (30) Calendar Days.

No officer, employee, or agent of the Agency, Agency Representative, the Engineer, or their consultants shall be personally responsible for any liability arising under or by virtue of the Contract.

To the maximum extent permitted by law, Contractor shall hold harmless, indemnify, and defend the City of Irvine, Irvine Ranch Water District (IRWD), Newport Beach, Caltrans, University of California Irvine (UCI) and County of Orange, their representatives and each of their officers, employees, and agents from and against any and all actions, suits, claims, demands, judgments, attorney's fees, costs, damages to persons or property, losses, penalties, obligations, expenses or liabilities (herein "claims" or "liabilities") that may be asserted or claimed by any person or entity arising out of the willful or negligent acts, errors or omissions of Contractor, its employees, agents, representatives or

subcontractors in the performance of any tasks or services for or on behalf of Agency, whether or not there is concurrent active or passive negligence on the part of Agency and/or Agency Personnel, but excluding such claims or liabilities arising from the active negligence or willful misconduct of Agency or Agency Personnel. In connection therewith:

a) Contractor shall defend any action or actions filed in connection with any such claims or liabilities, and shall pay all costs and expenses, including attorney's fees incurred in connection therewith.

b) Contractor shall promptly pay any judgment rendered against Agency or any Agency Personnel for any such claims or liabilities.

c) In the event Agency and/or any Agency Personnel is made a party to any action or proceeding filed or prosecuted for any such damages or other claims arising out of or in connection with the negligent performance or a failure to perform the work or activities of Contractor, Contractor shall pay to Agency any and all costs and expenses incurred by Agency or Agency Personnel in such action or proceeding, together with reasonable attorney's fees and expert witness fees. So much of the money due to the Contractor under and by virtue of the Contract as shall be considered necessary by the Agency may be retained by the Agency until disposition has been made of such actions or claims for damages as aforesaid.

Any deductibles or self-insured retentions must be declared to and approved by Agency prior to the execution of this Contract by Agency. Prior to commencing work, the Contractor will provide the Agency, in accordance with 7-3, written confirmation of the deductible for each insurance coverage required by this contract or in the case of no deductible.

DELETE 4th paragraph and SUBSTITUTE with the following:

All policies shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided.

In lieu of this endorsement, the Contractor shall either:

a) Submit a letter, signed by the insurance agent or broker, certifying that he/she shall notify the City should the coverage be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided; or

b) Submit evidence that the insurance premium has been paid in full for the life of the policy.

The City project title or description MUST be included in the “Description of Operations” box on the certificate.

Certificate Holder:
City of Irvine
c/o EXIGIS Risk Management Services
P.O. Box 4668 - ECM #35050
New York, NY 10163-4668

The City's insurance certificate tracking services provider, EXIGIS, LLC, will send Contractor an email message providing instructions for submitting insurance certificates and endorsements.

7-3.2 General Liability Insurance. *DELETE the 2nd paragraph and SUBSTITUTE with the following:*
General Liability (including premises, operations and mobile equipment, products and completed operations, broad form property damage including completed operations, explosion, collapse and underground hazards, contractual liability, personal injury, independent contractors' liability): with a minimum limit of Five Million Dollars ($5,000,000) for each occurrence (combined single limit for bodily injury and property damage). Minimum limit of Five Million Dollars ($5,000,000) aggregate for products–completed operations and with a minimum limit of Ten Million Dollars ($10,000,000) general aggregate. This general aggregate limit shall apply separately to the Contractor's work under this Contract.

Products-Completed Operations: Contractor shall procure and submit evidence of insurance in accordance with 7-3 of the Standard Specifications and these Special Provisions for a period of at least three (3) years from the time that all Work under this Contract is completed.

7-3.3 Workers' Compensation Insurance. *MODIFY to ADD the following:*
Workers' Compensation and Employer's Liability: Workers' Compensation Insurance in an amount required by the laws of the State of California (Statutory Limits). Employer's Liability Insurance with a minimum limit of One Million Dollars ($1,000,000) per occurrence.

In the event Contractor has no employees requiring Contractor to provide Workers' Compensation Insurance, Contractor shall so certify to Agency in writing prior to Agency's execution of this Contract. Agency and Agency Personnel shall not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this section or with the provisions of law relating to Workers' Compensation.

If Contractor is providing on-site staffing services, then the Workers' Compensation insurance shall include an Alternative Employers Endorsement.

ADD:

7-3.5 Contractor's Pollution Liability. Contractors Pollution Liability Insurance covering all of the contractor's operations to include onsite and offsite coverage for bodily injury, property damage, defense costs, cleanup costs, coverage for offsite disposal facilities with minimum limits of Five Million Dollars ($5,000,000) each loss and Ten Million Dollars ($10,000,000) in the aggregate.

Prior to commencing work, the Contractor shall provide the City the names and locations of disposal facilities for approval by the City.

7-3.7 Professional Liability Insurance. At its own expense, the successful Contractor will be required to obtain, pay for, and maintain, for the duration of the Agreement and for a minimum of five (5) years thereafter, a Professional Liability Insurance Policy (that includes errors and omissions, and professional malpractice) with a minimum limit of Two Million Dollars ($2,000,000) per claim. The policy shall provide coverage for any loss arising out of or caused by the Contractors performance of the Agreement.

7-3.8 Self-Insurance. Self-insurance will be subject to the Agency's review and prior approval. If the Contractor uses any form of self-insurance, it shall submit:

a) A notice of election to self-insure.

b) The coverages for which self-insurance applies.

c) The amount of self-insurance.

d) Declaration under the penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles (GAAP) guidelines and the Contractor has sufficient funds or other resources to cover the self-insurance amounts.

e) Copy of its commercial general liability policy and its excess policy, including the declarations page, all amendments, riders, endorsements and other modifications in effect at the time of contract execution, for those amounts not covered by self-insurance.

Self-insurance programs and self-insured retentions in insurance policies are subject to separate annual review and approval by the Agency of evidence of the Contractor's financial capacity to respond. Additionally, self-insurance programs or retentions must provide the Agency with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance.

7-5 PERMITS. *DELETE in its entirety and SUBSTITUTE with the following:*

7-5 PERMITS AND LICENSES. Except as otherwise specified in the Special Provisions, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the Work. Permits include but are not limited to; a Caltrans "Rider" permit for work within State right-of-way, an Orange County Public Right of Way excavation and construction permit from Orange County Public Works, City of Newport Beach encroachment permit, and California Coastal Commission permit. A copy of the aforementioned permits are included in Appendix B and the Contractor shall be required to comply with all the rules and regulations set for in the permits. These permits and licenses shall be obtained in sufficient time to prevent delays to the Work. These permits and licenses shall be obtained in sufficient time to prevent delays to the Work. The Contractor shall maintain a copy of all permits on the site. The Contractor shall furnish the Agency with copies of permits and licenses within one (1) Working Day of obtaining them. The Contractor shall comply with all rules and regulations included in permits. Should the Contractor fail to conform to said rules and regulations, the Agency reserves the right to perform the work necessary to conform to the rules and regulations and the cost of such work will be deducted from any monies due or to become due to the Contractor.

The Contractor and all subcontractors shall obtain within five (5) Calendar Days of executing the Contract, a current City of Irvine Business License and maintain such license(s) throughout the term of the Contract.

The Contractor will be required to apply for and receive a separate Caltrans Permit rider to the City of Irvine's Caltrans Encroachment Permit No. 12-16-N-MC-0201 for work performed on University Drive in Caltrans right-of-way, includes but is not limited to, removal and replacement of asphalt concrete pavement, grading of the gravel surface within Caltrans Right-of-Way on University Drive at MacArthur Boulevard, replacement of two (2) maintenance access driveways outside of Caltrans Right-of-Way on the south side of University Drive at MacArthur Bridge and traffic control. The Contractor will be required to comply with all requirements set forth in the City's permit with regards to traffic control, storm water pollution prevention / water pollution control plan, restricted work hours and other requirements set forth in the permit and directed by the Caltrans inspector.

In the event that the Agency has obtained permits, licenses or other authorizations applicable to the Work, the Contractor shall obtain a rider, pay all fees and comply with the provisions of said permits, licenses and other authorizations.

7-6 THE CONTRACTOR'S REPRESENTATIVE. *DELETE the 3rd sentence in the 1st paragraph and SUBSTITUTE with the following:*
Said authorized representative shall be present at the site of the Work at all times while Work is actually in progress on the Contract. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Agency Representative shall be made for any emergency work, which may be required.

ADD the following after the last sentence of the 1st paragraph:

Whenever the Contractor or his authorized representative is not present on any particular part of the Work where it may be desired to give direction, orders will be given by the Agency Representative, which shall be received and obeyed by the superintendent or supervisor who may have charge of the particular work in reference to which the orders are given.

The Agency reserves the right to approve the Contractor's Superintendent. Once approved, the Superintendent shall remain on the project for the duration of the project so long as he is in the employment of the Contractor.

7-7 COOPERATION AND COLLATERAL WORK. *DELETE in its entirety 4th paragraph and SUBSTITUTE with the following:*
Nothing in the Contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Agency in the construction of the project, to the end that the Contractor may perform this Contract in the light of such other constraints, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on or adjacent to the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Engineer will decide which contractor shall cease work

temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the Contractors may proceed simultaneously. On all questions concerning conflicting interest of Contractors performing related work, the decision of the Engineer shall be binding upon Contractors concerned. The Agency, the Engineer, the Agency Representative, and each of their officers, employees, and agents shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award of performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Engineer respecting the order of precedence in the performance of the contracts.

If, through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the Work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Agency, the Engineer, the Agency Representative, or their consultants on account of any damage alleged to have been so sustained, the Agency will notify the Contractor. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of the assertion of any such claims or liabilities against the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any such claim.

ADD:

7-7.1 Coordination. It is anticipated that work by other contractors, utility companies and City of Irvine forces will be underway adjacent to or within the limits of this project during progress of the Work on this contract.

It is anticipated that construction projects including, but not limited to, the following may be in progress concurrently with this project:

a) Campus Drive Pavement Rehabilitation, CIP 311604

b) University/Ridgeline Intersection Improvement, CIP 311504

c) Culver/University Intersection Improvement Project, CIP 318030

d) IRWD - UCI Cooling Tower Project

The Contractor shall coordinate his operations with the operations of other contractors during stage construction, traffic shifts, opening of new lanes, closing of lanes, roads or ramps, detours, traffic signal facilities, shared irrigation facilities for landscaped areas and during any other operation that may affect or have influence on adjacent projects including, but not limited to, those identified in this subsection.

7-8 WORK SITE MAINTENANCE. *MODIFY to ADD the Following:*
Section 7-8 includes specifications for performing work site maintenance, including spill prevention and control, material management, waste management, water pollution control and nonstormwater management.

Projects are required to comply with the City of Irvine Resolution No. 07-18, which establishes requirements for recycling and diversion of construction and demolition waste.

The Contractor shall implement effective handling, storage, usage, and disposal practices to control material pollution and manage waste and nonstormwater at the job site before they come in contact with storm drain systems and receiving waters.

Linear sediment barriers must comply with 7-8.6.2 of the Standard Specifications and the Contract Special Provisions.

ADD:

7-8.1.1 Construction Cleaning. The Contractor shall:

a) Initiate and maintain a daily program to prevent accumulation of debris on-site and along access roads and haul routes. Maintain areas under Contractor's control free of waste materials, debris, weeds 6” high, and rubbish. Maintain site in a clean and orderly condition.

b) Provide suitable covered containers for deposit of debris and rubbish. Dispose of accumulation of extraneous materials, prohibit overloading of trucks to prevent spillages on access and haul routes and provide daily inspection of haul routes to enforce requirements.

c) The Contractor shall supply self-loading motorized street sweepers equipped with a functional water spray system as part of his daily program.

d) Schedule at a minimum, weekly collection and disposal of debris. Provide additional collections and disposals of debris whenever the weekly schedule is inadequate to prevent accumulation.

The Contractor shall remove debris from closed or remote spaces prior to closing the space, control cleaning operations to minimize dust and other particulates and immediately remove clay and earth which adhere to the paved surface of the roadway. Remove by hand scraping, washing, sweeping, and/or other method(s) which will leave a clean non-skid surface without impairing, injuring or loosening the surface.

The Contractor shall remove waste materials, debris, vegetation, other rubbish, and non-recyclable materials as required by the Contract Documents, and dispose of off-site in an approved disposal site or recycling center.

Unless otherwise specified in the Special Provisions, all concrete, asphalt, aggregate or sand base material, cement block, trees, shrubs, bushes, and all other recyclable material generated during cleaning, demolition, clearing and grubbing or other phases of the work is to be disposed of at appropriate recycling centers. The Contractor shall be responsible for removing reinforcing steel, wood, or other deleterious materials as required by the recycling center for acceptance of recycled materials. The Contractor shall supply proof of disposal at a recycling center. The proof of disposal shall include verification of tonnage by certified weigh masters tickets. If weigh masters tickets are not feasible, the Contractor and Agency Representative shall estimate the tonnage prior to disposal at the recycling centers.

Known recycling centers:

Ewles Materials
16081 Construction Circle West
Irvine

The Contractor is required to control dust throughout the life of the Contract. The control may be required by job conditions or Agency Representative. In any case, the Contractor shall use water or other means to control the dust. No chemical agents may be used without written authorization from the Agency. The Contractor shall be solely responsible for safety problems, accidents or any other complications or claims arising from inadequate dust control.

No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the Work, or by public traffic, either inside or outside the right of way. Full compensation for such dust control will be considered as included in the price paid for the various items of work involved.

No separate payment will be made for any work performed or material used in cleaning the project. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.1.2 Final Cleaning. The Contractor shall execute cleaning prior to inspection for completion of the Work. The Contractor shall use materials which will not create hazards to health or property, and which will not damage surfaces, remove debris from and otherwise clean exposed-to-view surfaces, remove temporary protection and labels not required to remain, clean finishes free of foreign substances, remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean, clean other exterior surfaces and where applicable:

a) Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.

b) Vacuum clean carpeted and similar soft surfaces.

c) Clean resilient and hard surface floors.

d) Clean surfaces of equipment; remove excess lubrication.

e) Clean plumbing fixtures to a sanitary condition.

f) Clean permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts, blowers, and coils when units have been operated without filters during construction.

g) Clean light fixtures and lamps.

h) Remove waste, foreign matter, and debris from roofs, gutters, areaways, and drainage systems.

ADD:

7-8.4.3 Material Management.

7-8.4.3.1 General. The Contractor shall minimize or eliminate discharge of material into the air, storm drain systems, and receiving waters while taking delivery of, using, or storing the following materials:

a) Hazardous chemicals, including acids, lime, glues, adhesives, paints, solvents, and curing compounds
b) Soil stabilizers and binders
c) Fertilizers
d) Detergents
e) Plaster
f) Petroleum materials, including fuel, oil, and grease
g) Asphalt and concrete components
h) Pesticides and herbicides

The Contractor's employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

The Contractor shall use less hazardous materials if practicable.

The following activities must be performed at least 100 feet from concentrated flows of stormwater, drainage courses, and inlets if within the floodplain and at least 50 feet if outside the floodplain, unless otherwise authorized:

a) Stockpiling materials
b) Storing pile-driving equipment and liquid waste containers
c) Washing vehicles and equipment in outside areas
d) Fueling and maintaining vehicles and equipment

7-8.4.3.2 Material Storage. If materials are stored by the Contractor, he shall:

a) Store liquids, petroleum materials, and substances listed in 40 CFR 110, 117, and 302 and place them in secondary containment facilities as specified by USDOT for storage of hazardous materials.
b) Ensure that secondary containment facilities are impervious to the materials stored there for a minimum contact time of 72 hours.
c) Cover secondary containment facilities during nonworking days and whenever precipitation is forecasted. Secondary containment facilities must be adequately ventilated.
d) Keep secondary containment facilities free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place it into drums within 24 hours. Handle the liquid as hazardous waste in accordance with subsection 7-8 of the Standard Specifications and these Special Provisions.
e) Not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.
f) Store materials in their original containers with the original material labels maintained in legible condition. Immediately replace damaged or illegible labels.
g) Ensure that secondary containment facilities have the capacity to contain precipitation from a 24-hour-long, 25-year storm, plus 10 percent of the

aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.

h) Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during nonworking days and whenever precipitation is forecasted.

i) Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized, and equipped with cleanup supplies appropriate for the materials being stored.

j) Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation and at least weekly during other times.

7-8.4.3.3 Stockpile Management. The Contractor shall minimize stockpiling of materials at the job site.

The Contractor shall implement water pollution control practices within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If stockpiles are being used, do not allow soil, sediment, or other debris to enter storm drains, open drainages, and watercourses.

Active and inactive soil stockpiles must be:

a) Covered with soil stabilization material or a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of asphalt concrete and PCC rubble, HMA, aggregate base, or aggregate sub base must be:

a) Covered with a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of pressure-treated wood must be:

a) Placed on pallets

b) Covered with impermeable material

Stockpiles of cold mix asphalt concrete must be:

a) Placed on an impervious surface

b) Covered with an impermeable material

c) Protected from stormwater run-on and runoff

The Contractor shall control wind erosion year round.

The Contractor shall repair or replace linear sediment barriers and covers as needed to keep them functioning properly. Whenever sediment accumulates to 1/3 of the linear sediment barrier height, remove the accumulated sediment.

7-8.5.3 Spill Prevention and Emergency Response Plan.

ADD:

7-8.5.3.1 Spill Prevention and Control. The Contractor shall keep material or waste storage areas clean, well-organized, and equipped with enough cleanup supplies for the material being stored.

The Contractor shall implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. Whenever the Contractor spills or leaks chemicals or hazardous substances at the job site, he is responsible for all associated cleanup costs and related liability.

The Contractor shall report minor, semi significant, and significant or hazardous spills to the WPC manager and the WPC manager must notify the Engineer immediately.

As soon as it is safe, the Contractor shall contain and clean up spills of petroleum materials and sanitary and septic waste substances listed under 40 CFR, parts 110, 117, and 302.

ADD:

7-8.5.3.2 Minor Spills. Minor spills consist of quantities of oil, gasoline, paint, or other materials that are small enough to be controlled by a first responder upon discovery of the spill.

The Contractor shall clean up a minor spill using the following procedures:

a) Contain the spread of the spill
b) Recover the spilled material using absorption
c) Clean the contaminated area
d) Dispose of the contaminated material and absorbents promptly and properly

ADD:

7-8.5.3.3 Semi Significant Spills. Semi significant spills consist of spills that can be controlled by a first responder with help from other personnel.

The Contractor shall clean up a semi significant spill immediately using the following procedures:

a) Contain the spread of the spill.
b) On paved or impervious surfaces, encircle and recover the spilled material with absorbent materials. Do not allow the spill to spread widely.
c) If the spill occurs on soil, contain the spill by constructing an earthen dike and dig up the contaminated soil for disposal.
d) If the spill occurs during precipitation, cover the spill with 10-mil plastic sheeting or other material to prevent contamination of runoff.
e) Dispose of the contaminated material promptly and properly.

ADD:

7-8.5.3.4 Significant or Hazardous Spills. Significant or hazardous spills consist of spills that cannot be controlled by job site personnel.

The Contractor shall immediately notify qualified personnel of a significant or hazardous spill and take the following steps:

a) Do not attempt to clean up the spill until qualified personnel have arrived.

b) Notify the Engineer and follow up with a report.

c) Obtain the immediate services of a spill contractor or hazardous material team.

d) Notify local emergency response teams by dialing 911 and county officials by using the emergency phone numbers retained at the job site.

e) Notify the California Emergency Management Agency State Warning Center at 916-845-8911.

f) Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under 40 CFR 110, 119, and 302.

g) Notify other agencies as appropriate, including:

    1) Fire Department

    2) Public Works Department

    3) Coast Guard

    4) Highway Patrol

    5) City Police or County Sheriff's Department

    6) Department of Toxic Substances

    7) California Division of Oil and Gas

    8) Cal/OSHA

    9) Regional Water Resources Control Board

The Contractor shall prevent a spill from entering stormwater runoff before and during cleanup activities and shall not bury or wash the spill with water.

ADD:

7-8.5.4 Waste Management.

7-8.5.4.1 Paint Waste. The Contractor shall clean water-based and oil-based paint from brushes or equipment within a contained area in a way that does not contaminate soil, receiving waters, or storm drain systems. Handle and dispose of the following as hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste under: dry latex paint, paint cans, used brushes, rags, absorbent materials, and drop cloths.

7-8.5.4.2 Concrete Waste. The Contractor shall use practices to prevent the discharge of asphalt concrete, PCC, and HMA waste into storm drain systems and receiving waters.

The Contractor shall collect and dispose of asphalt concrete, PCC, and HMA waste at locations where:

a) Concrete material, including grout, is used.

b) Concrete dust and debris result from demolition.

c) Saw cutting, coring, grinding, grooving, or hydro-concrete demolition creates a residue or slurry.

d) Concrete trucks or other concrete-coated equipment is cleaned at the job site.

7-8.5.4.3 Sanitary and Septic Waste. The Contractor shall not bury or discharge wastewater from a sanitary or septic system anywhere at the site of Work. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. The Contractor shall place a portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines.

The Contractor shall comply with local health agency provisions if using an on-site disposal system.

7-8.5.4.4 Liquid Waste. The Contractor shall use practices that will prevent job-site liquid waste from entering storm drain systems and receiving waters. Liquid wastes include the following:

a) Drilling slurries or fluids

b) Grease-free and oil-free wastewater and rinse water

c) Dredgings, including liquid waste from cleaning drainage systems

d) Liquid waste running off a surface, including wash or rinse water

e) Other nonstormwater liquids not covered by separate permits

The Contractor shall hold liquid waste in structurally sound, leak-proof containers, such as roll-off bins or portable tanks.

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills, and leaks.

The Contractor shall store containers at least 50 feet from moving vehicles and equipment.

The Contractor shall remove and dispose of deposited solids from sediment traps in accordance with 7-8 of the Standard Specifications and these Special Provisions. Liquid waste may require testing to determine hazardous material content before disposal.

The Contractor shall dispose of drilling fluids and residue.

If an authorized location is available within the job site, fluids and residue exempt under 23 CA Code of Regs § 2511(g) may be dried by evaporation in a leak-proof container. The Contractor shall dispose of the remaining solid waste in accordance with 7-8 of the Standard Specifications and these Special Provisions.

ADD:

7-8.5.5 Nonstormwater Management.

7-8.5.5.1 Water Control and Conservation. The Contractor shall manage water used for work activities in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Obtain authorization before washing

anything at the job site with water that could discharge into a storm drain system or receiving waters. Report discharges immediately.

The Contractor shall implement water conservation practices if water is used at the job site. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off the water source to broken lines, sprinklers, or valves and repair breaks within 24 hours. Reuse water from waterline flushing for landscape irrigation if practicable. Sweep and vacuum paved areas. Do not wash paved areas with water.

The Contractor shall direct runoff water, including water from water line repair, from the job site to areas where it can infiltrate into the ground. Do not allow runoff water to enter storm drain systems and receiving waters. Do not allow spilled water to escape filling areas for water trucks. Direct water from off-site sources around the job site if practicable. Minimize the contact of off-site water with job site water.

7-8.5.5.2 Illicit Connection and Illegal Discharge Detection and Reporting. Before starting work, the Contractor shall inspect the job site and the job site's perimeter for evidence of illicit connections, illegal discharges, and dumping. After starting work, inspect the job site and perimeter on a daily schedule for illicit connections and illegal dumping and discharges.

Whenever illegal connections, discharges, or dumping are discovered, The Contractor shall notify the Engineer immediately, should take no further action unless ordered and assume that unlabeled or unidentifiable material is hazardous.

The Contractor shall look for the following evidence of illicit connections, illegal discharges, and dumping:

a) Debris or trash piles
b) Staining or discoloration on pavement or soils
c) Pungent odors coming from drainage systems
d) Discoloration or oily sheen on water
e) Stains and residue in ditches, channels, or drain boxes
f) Abnormal water flow during dry weather
g) Excessive sediment deposits
h) Nonstandard drainage junction structures
i) Broken concrete or other disturbances at or near junction structures

7-8.5.5.3 Vehicle and Equipment Cleaning. The Contractor shall limit vehicle and equipment cleaning or washing at the job site except for what is necessary to control vehicle tracking or hazardous waste. The Contractor shall notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam and contain and recycle or dispose of resulting waste under 7-10.4.4. The Contractor shall not use diesel to clean vehicles or equipment and minimize the use of solvents.

The Contractor shall clean or wash vehicles and equipment in a structure equipped with disposal facilities. The Contractor may wash vehicles in an outside area if the area is:

a) Paved with asphalt concrete, HMA, or PCC
b) Surrounded by a containment berm
c) Equipped with a sump to collect and dispose of wash water

The Contractor shall use as little water as practicable whenever washing vehicles and equipment with water and hoses used must be equipped with a positive shutoff valve.

The Contractor shall discharge liquid from wash racks to a recycling system or to another authorized system. Remove liquids and sediment as necessary.

7-8.5.5.4 Vehicle and Equipment Fueling and Maintenance. If practicable, the Contractor shall perform maintenance on vehicles and equipment off-site.

If fueling or maintenance must be done at the job site, the Contractor shall assign a site or sites, and obtain authorization before using them. The Contractor shall minimize mobile fueling and maintenance activities. The Contractor's fueling and maintenance activities must be performed on level ground in areas protected from stormwater run-on and runoff.

The Contractor shall use containment berms or dikes around fueling and maintenance areas. Keep adequate quantities of absorbent spill-cleanup material and spill kits in the fueling or maintenance area and on fueling trucks. The Contractor shall dispose of spill-cleanup material and kits immediately after use and use drip pans or absorbent pads during fueling or maintenance.

The Contractor shall not leave fueling or maintenance areas unattended during fueling and maintenance activities. The Contractor's fueling nozzles must be equipped with an automatic shutoff control. The Contractor shall use equipment with vapor-recovery fueling nozzles where required by the Air Quality Management District, secure nozzles in an upright position when not in use and shall not top off fuel tanks.

The Contractor shall recycle or properly dispose of used batteries and tires.

If leaks cannot be repaired immediately, the Contractor shall remove the vehicle or equipment from the job site.

7-8.5.5.5 Material and Equipment Used Over Water. The Contractor shall place drip pans and absorbent pads under vehicles and equipment used over water, keep an adequate supply of spill-cleanup material with vehicles and equipment, place drip pans or plastic sheeting under vehicles and equipment on docks, barges, or other surfaces over water whenever vehicles or equipment will be idle for more than one (1) hour.

The Contractor shall furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools and shall secure material to prevent spills or discharge into the water due to wind.

The Contractor shall report discharges to receiving waters immediately upon discovery and shall submit a discharge notification.

7-8.5.5.6 Structure Removal Over or Adjacent to Water. The Contractor shall not allow demolished material to enter storm drain systems and receiving waters, use authorized covers and platforms to collect debris, use attachments on equipment to catch debris during small demolition activities and empty debris-catching devices daily and dispose of debris in accordance with 7-8 of the Standard Specifications and these Special Provisions.

7-8.5.5.7 Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities. The Contractor shall prevent material from entering storm drain systems and receiving waters including:

a) Cementitious material
b) Asphaltic material
c) Aggregate or screenings
d) Saw cutting, grooving, and grinding residue
e) Pavement chunks
f) Shoulder backing
g) Methacrylate
h) Sandblasting residue

The Contractor shall cover drainage inlets and use linear sediment barriers to protect downhill receiving waters until paving, sealing, saw cutting, grooving, and grinding activities are completed and excess material has been removed and cover drainage inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.

Whenever precipitation is forecasted, the Contractor shall limit paving, saw cutting, and grinding to places where runoff can be captured.

The Contractor shall not start seal coat, tack coat, slurry seal, or fog seal activities whenever precipitation is forecasted during the application and curing period and shall not excavate material from existing roadways during precipitation.

The Contractor shall use a vacuum to remove slurry immediately after slurry is produced and shall not allow the slurry to run onto lanes open to traffic or off the pavement.

The Contractor shall collect the residue from PCC grooving and grinding activities with a vacuum attachment on the grinding machine. The Contractor shall not leave the residue on the pavement or allow the residue to flow across pavement.

The Contractor shall not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.

The Contractor shall park paving equipment over drip pans or plastic sheeting with absorbent material to catch drips if the paving equipment is not in use.

7-8.5.5.8 Thermoplastic Striping and Pavement Markers. The Contractor shall not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets and receiving waters.

The Contractor shall not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets and receiving waters.

The Contractor shall collect and dispose of bituminous material from the roadway after removing markers.

7-8.5.5.9 Pile Driving. The Contractor shall keep spill kits and cleanup materials at pile driving locations; park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material; protect pile driving equipment by parking on plywood and covering with plastic whenever precipitation is forecasted.

The Contractor shall store pile driving equipment on level ground and protect it from stormwater run-on when not in use. Use vegetable oil instead of hydraulic fluid if practicable.

7-8.5.5.10 Concrete Curing. The Contractor shall not overspray chemical curing compounds and shall not allow runoff of curing compounds.

The Contractor shall minimize the drift by spraying as close to the concrete as practicable, cover drainage inlets before applying the curing compound, and minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture when concrete is curing.

7-8.5.5.11 Concrete Finishing. The Contractor shall collect and dispose of water and solid waste from high-pressure water blasting, collect and dispose of sand and solid waste from sandblasting. Before sandblasting, the Contractor shall cover drainage inlets within 50 feet of sandblasting, and shall minimize the drift of dust and blast material by keeping the nozzle close to the surface of the concrete. If the character of the blast residue is unknown, the Contractor shall test it for hazardous materials and dispose of it properly.

The Contractor shall inspect containment structures for concrete finishing for damage before each day of use and before forecasted precipitation and remove liquid and solid waste from containment structures after each work shift.

7-8.5.5.12 Sweeping. The Contractor shall sweep by hand or mechanical methods, such as vacuuming, and shall not use methods that use only mechanical kick brooms.

The Contractor shall sweep paved roads at construction entrance and exit locations and paved areas within the job site:

a) During clearing and grubbing activities
b) During earthwork activities
c) During trenching activities
d) During pavement structure activities
e) When vehicles are entering and leaving the job site

f) After soil-disturbing activities

g) After observing off-site tracking of material

h) As deemed necessary by the Engineer

The Contractor shall monitor paved areas and roadways within the project and sweep within:

a) 1 hour whenever sediment or debris is observed during activities that require sweeping.

b) 24 hours whenever sediment or debris is observed during activities that do not require sweeping.

The Contractor shall remove collected material, including sediment, from paved shoulders, drain inlets, curbs and dikes, and other drainage areas, may stockpile collected material at the job site, and shall dispose of collected material at least once per week if stockpiled.

The Contractor shall keep dust to a minimum during street sweeping activities and use water or a vacuum whenever dust generation is excessive or sediment pickup is ineffective.

The Contractor shall remove and dispose of trash collected during sweeping.

7-8.5.5.13 Dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities.

The Contractor shall perform dewatering work as specified for the work items involved, such as temporary active treatment system or dewatering and discharge.

If dewatering and discharging activities are not specified under a work item and the Contractor performs dewatering activities, he shall:

a) Conduct dewatering activities under the Caltrans' *Field Guide for Construction Site Dewatering*.

b) Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.

c) Discharge the water within the project limits if approved by the Engineer. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.

d) Not discharge stormwater or nonstormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface.

e) Notify the Engineer immediately upon discovering any such condition.

7-8.6 Water Pollution Control.

7-8.6.1 General. *ADD the following after the last paragraph:*

This project is Risk Level 2.

ADD:

7-8.6.1.1 Definitions and Abbreviations.

Active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 15 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

Construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

NAL: Numeric Action Level.

NEL: Numeric Effluent Limit.

Normal working hours: The hours the Contractor normally works on this project.

Preparation Manual: The Caltrans' "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

QSD: Qualified SWPPP Developer.

QSP: Qualified SWPPP Practitioner.

Qualified rain event: A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48 hour or greater period between storms.

REAP: Rain Event Action Plan.

SAP: Sampling and Analysis Plan.

SSC: Suspended Sediment Concentration.

SWRCB: State Water Resources Control Board.

WPC: Water Pollution Control.

WPC Manager: The Contractor's Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

7-8.6.1.2 Summary. Section 7-8.6 includes general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.

Information on forms, reports, and other documents can be found in the following Caltrans manuals:

a) *Field Guide for Construction Site Dewatering*

b) *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*

c) *Construction Site Best Management Practices (BMP) Manual*

d) *Construction Site Monitoring Program (CSMP) Guidance Manual*

For the above-referenced manuals, go to the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control at (Informationhttp://www.dot.ca.gov/hq/construc/stormwater/) or the Caltrans' publication distribution unit.

The Contractor shall not start job site activities until:

a) The WPCP or SWPPP, in accordance with 7-8.6.3 of the Special Provisions, is authorized.

b) The waste discharge identification number is issued if the project requires a SWPPP.

c) WPCP or SWPPP review requirements have been fulfilled. If the RWQCB requires time for review, allow 30 days for the review.

If the Contractor operates a Contractor-support facility, the Contractor shall protect stormwater systems or receiving waters from the discharge of potential pollutants by using water pollution control practices.

Contractor-support facilities include:

a) Staging areas

b) Storage yards for equipment and materials

c) Mobile operations

d) Batch plants for PCC and HMA

e) Crushing plants for rock and aggregate

f) Other facilities installed by the Contractor for his, such as haul roads

Discharges from manufacturing facilities, such as batch plants and crushing plants, must comply with the general waste discharge requirements for *Order No. 97-03-DWQ, NPDES General Permit No. CAS000001*, issued by the State Water Resources Control Board for "*Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities*" and referred to herein as "General Industrial Permit." For the General Industrial Permit, go to the Web site for the State Water Resources Control Board.

If the Contractor operates a batch plant to manufacture PCC, HMA, or other material or a crushing plant to produce rock or aggregate, the Contractor shall obtain coverage under the General Industrial Permit. The Contractor must be covered under the General Industrial Permit for batch plants and crushing plants located:

a) Outside of the job site

b) Within the job site that serve 1 or more contracts

If the Contractor obtains or disposes of material at a noncommercially operated borrow or disposal site, the Contractor shall prevent water pollution due to erosion at the site during and after completion of his activities. Upon completion of his work, the Contractor shall leave the site in a condition such that water will not collect or stand therein.

The Agency does not pay for water pollution control practices at Contractor-support facilities and noncommercially operated borrow or disposal sites.

7-8.6.1.3 Submittals. Within 48 hours after the conclusion of a storm event resulting in a discharge, after a nonstormwater discharge, or after receiving a written notice or an order from the RWQCB or another regulatory agency, the Contractor's WPC manager must submit the following information:

a) Date, time, location and nature of the activity and the cause of the notice or order
b) Type and quantity of discharge
c) Water pollution control practices in use before the discharge or before receiving the notice or order
d) Description of water pollution control practices and corrective actions taken to manage the discharge or cause of the notice

The Contractor shall submit water pollution control training records for all employees and subcontractors who will be working at the job site as an informational submittal that includes the training subjects, training dates, ongoing training, and tailgate meetings with the submittal. The Contractor shall submit records for:

a) Existing employees within 5 business days of obtaining SWPPP or WPCP authorization
b) New employees within 5 business days of receiving the training
c) Subcontractor's employees at least 5 business days before a subcontractor starts work

At least Five (5) business days before operating any Contractor-support facility, the Contractor shall submit:

a) A plan showing the location and quantity of water pollution control practices associated with the Contractor-support facility
b) A copy of the notice of intent approved by the RWQCB and the WPCP or SWPPP approved by the RWQCB if the Contractor will be operating a batch plant or a crushing plant under the General Industrial Permit

7-8.6.1.4 Quality Control and Assurance.

Training

The Contractor shall employees must receive water pollution control training before starting work at the job site.

For the Contractor’s project managers, supervisory personnel, subcontractors, and employees involved in water pollution control work:

a) The Contractor shall provide stormwater training in the following subjects:
    1) Water pollution control rules and regulations
    2) Implementation and maintenance for:
        (a) Temporary soil stabilization
        (b) Temporary sediment control
        (c) Tracking control
        (d) Wind erosion control
        (e) Material pollution prevention and control
        (f) Waste management
        (g) Nonstormwater management
b) The Contractor shall conduct weekly training meetings covering:

1) Deficiencies and corrective actions for water pollution control practices
2) Water pollution control practices required for work activities during the week
3) Spill prevention and control
4) Material delivery, storage, usage, and disposal
5) Waste management
6) Nonstormwater management procedures

Training for personnel who collect water quality samples must include:

a) CSMP review
b) Health and safety review
c) Sampling simulations

7-8.6.1.5 Water Pollution Control Manager.

General

The Contractor's WPC manager must be a QSP if the project requires a WPCP. The Contractor's WPC manager must be a QSD if the project requires a SWPPP.

The Contractor shall assign one (1) WPC manager to implement the WPCP or SWPPP, whichever is applicable for the project.

Qualifications

The Contractor's QSD must:

a) Have completed the stormwater management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information
b) Be registered or certified for at least one of the following:
    1) California registered civil engineer
    2) California registered professional geologist or engineering geologist
    3) California licensed landscape architect
    4) Professional hydrologist registered through the American Institute of Hydrology
    5) Certified Professional in Erosion and Sediment Control (CPESC)™ registered through Enviro Cert International, Inc.
    6) Certified Professional in Storm Water Quality (CPSWQ)™ registered through Enviro Cert International, Inc.
    7) Professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET)

The Contractor's QSP must comply with the qualifications for a QSD or must:

a) Have completed the storm water management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information

b) Be certified for at least one of the following:

    1) Certified Erosion, Sediment and Storm Water Inspector (CESSWI)™ registered through Enviro Cert International, Inc.

    2) Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.

Responsibilities

The Contractor's WPC manager must:

a) Be responsible for water pollution control work

b) Be the primary contact for water pollution control work

c) Oversee:

    1) Maintenance of water pollution control practices

    2) Inspections of water pollution control practices identified in the SWPPP or WPCP

    3) Inspections and reports for visual monitoring

    4) Preparation and implementation of REAPs

    5) Sampling and analysis

    6) Preparation and submittal of:

        (a) NAL exceedance reports

        (b) NEL violation reports

        (c) SWPPP annual certification

        (d) Annual reports

        (e) BMP status reports

a) Oversee and enforce hazardous waste management practices, including spill prevention and control measures

b) Have authority to mobilize crews to make immediate repairs to water pollution control practices

c) Ensure that all employees have current water pollution control training

d) Implement the authorized SWPPP or WPCP

e) Amend the SWPPP or WPCP if required

f) Be at the job site within 2 hours of being contacted

g) Have the authority to stop construction activities damaging water pollution control practices or causing water pollution

7-8.6.1.6 Construction.

General

The Contractor shall install facilities and devices used for water pollution control practices before performing work activities. The Contractor shall install soil stabilization materials for water pollution control practices in all work areas that are inactive and before storm events.

The Contractor shall repair or replace water pollution control practices within 24 hours of discovering any damage, unless a longer period is authorized.

The Agency will not pay for the cleanup, repair, removal, disposal, or replacement of water pollution control practices due to improper installation or the Contractor's negligence.

The Contractor shall retain a printed copy of the authorized WPCP or SWPPP at the job site at all times.

Monitoring

The Contractor shall monitor the National Weather Service's forecast on a daily basis. For the National Weather Service's forecast, go to the Web site for the National Weather Service.

Inspections

The Contractor shall use the *Stormwater Site Inspection Report* form for documenting site inspections.

The Contractor's WPC manager must oversee:

a) Inspections of water pollution control practices identified in SWPPP or WPCP:
    1) Before a forecasted storm event
    2) After a qualifying rain event that produces site runoff
    3) At 24-hour intervals during extended storm events
    4) On a predetermined schedule of at least once a week

b) Daily inspections of:
    1) Storage areas for hazardous materials and waste
    2) Hazardous waste disposal and transporting activities
    3) Hazardous material delivery and storage activities

c) Inspections of:
    1) Vehicle and equipment cleaning facilities:
        (a) Daily if vehicle and equipment cleaning occurs daily
        (b) Weekly if vehicle and equipment cleaning does not occur daily
    2) Vehicle and equipment maintenance and fueling areas:
        (a) Daily if vehicle and equipment maintenance and fueling occurs daily

(b) Weekly if vehicle and equipment maintenance and fueling does not occur daily

3) Vehicles and equipment at the job site for leaks and spills on a daily schedule. Verify that operators are inspecting vehicles and equipment each day of use.
4) Demolition sites within 50 feet of storm drain systems and receiving waters daily.
5) Pile driving areas for leaks and spills:
    (a) Daily if pile driving occurs daily
    (b) Weekly if pile driving does not occur daily
6) Temporary concrete washouts:
    (a) Daily if concrete work occurs daily
    (b) Weekly if concrete work does not occur daily
7) Paved roads at job site access points for street sweeping:
    (a) Daily if earthwork and other sediment or debris-generating activities occur daily
    (b) Weekly if earthwork and other sediment or debris-generating activities do not occur daily
    (c) Within 24 hours of precipitation forecasted by the National Weather Service
8) Dewatering work:
    (a) Daily if dewatering work occurs daily
    (b) Weekly if dewatering work does not occur daily
9) Temporary active treatment system:
    (a) Daily if temporary active treatment system activities occur daily
    (b) Weekly if temporary active treatment system activities do not occur daily
10) Work over water:
    (a) Daily if work over water occurs daily
    (b) Weekly if work over water does not occur daily

Deficiencies

Whenever the Contractor or the Engineer identify a deficiency in the implementation of the authorized WPCP or SWPPP, The Contractor shall correct the deficiency:

(a) Immediately, unless a later date is authorized

(b) Before precipitation occurs

The Agency may correct the deficiency and deduct the cost of correcting the deficiency from payment if the Contractor fails to correct the deficiency by the agreed date or before the onset of precipitation.

7-8.6.2 Best Management Practices (BMPs). *MODIFY to ADD the following:*
BMPs shall be maintained and/or added based on the REAP and any exceedances of Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs). The Contractor shall make any necessary changes to the SWPPP and implement additional BMPs that will result in effluent levels below that of NALs.

7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP). *DELETE in its entirety and SUBSTITUTE with the following:*

7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP)

7-8.6.3.1 General.

Summary

The Contractor shall prepare a storm water pollution prevention plan that includes developing and implementing the SWPPP, providing a WPC manager, conducting water pollution control training, and monitoring, inspecting, and correcting water pollution control practices.
The Contractor shall provide all documents to the SMARTS System for Agency review and acceptance.

The Contractor may assign a QSD other than the WPC manager to develop the SWPPP.

Construction activities will be conducted in a manner to protect channels, storm drains, and bodies of water from pollution. Water pollution control work shall consist of activities necessary to meet the requirements of the Orange County MS4 permit, Order No. R8-2009-0030, NPDES Permit No. CAS618030 a copy of which can be found at http://www.swrcb.ca.gov/rwqcb8/water_issues/programs/stormwater/oc_permit.shtml; the County's Drainage Area Management Plan (DAMP) at http://www.ocwatersheds.com/DAMP.aspx; The State's General Construction Activities Permit (Order No. 2009-0009-DWQ, NPDES No CAS000002, at http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo2009_0009_dwq.pdf; and as required by the Engineer. The Contractor shall coordinate water pollution control work with all other work done on the Contract.

The Contractor shall comply with all requirements of the above-mentioned permits, including visual monitoring, sample collection and analysis, training qualifications and certification requirements, risk determination, preparation and implementation of a Rain Event Action Plan (REAP) and a Storm Water Pollution Prevention Plan (SWPPP).

The Contractor shall make the accepted SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Agency Representative. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

Implementation of the SWPPP shall not reduce effectiveness of existing storm drain system or interfere with traffic on public streets. The Contractor shall implement the SWPPP, make changes both to the SWPPP, and in the field as conditions warrant it.

The Contractor shall be solely responsible for preventing any pollutants from leaving the project site.

In lieu of the Notice of Intent, the Contractor is required to notify the Engineer prior to the beginning of construction and upon project completion.

The Contractor shall notify the Agency Representative immediately upon request from any regulatory agency to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to storm water pollution control work. The Contractor shall provide copies of correspondence, notices of violation, enforcement actions, or fines proposed by regulatory agencies to the Engineer.

During each estimate period the Contractor fails to conform to the provisions in this section, "Water Pollution Control," or fails to implement the water pollution control practices shown on the accepted SWPPP and specified elsewhere in these special provisions, the City will withhold 25 percent of the progress payment.

Withholds for failure to perform water pollution control work will be in addition to all other withholds provided for in the contract. The City will return performance-failure withholds in the progress payment following the correction for noncompliance.

Contractor will also be responsible for any enforcement actions and penalties enacted on the Agency by the State Water Resources Control Board, Regional Water Quality Control Board, and/or any other agency due to Contractor's non-compliance with applicable water pollution regulations. Progress payments and/or final payments may be withheld to cover enforcement liabilities that include, but are not limited to, maximum financial penalties, legal costs, staff costs, and economic savings from violations and/or costs associated with corrective actions as required by enforcing agency.

Whenever a qualifying rain event produces runoff for a risk level 2 or risk level 3 project, sampling and analysis work must comply with the project's CSMP.

A storm water annual report must cover the preceding period from July 1st to June 30th.

Submittals

Submittals shall conform to 2-5.3 of the Standard Specifications and the Special Provisions.

Within 20 days of Contract approval:

a) The Contractor shall submit 3 printed copies of his SWPPP for review. Allow 20 days for the Agency's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.

b) The Contractor shall change and resubmit a revised SWPPP within 15 days of receiving the Engineer's comments. The Agency's review resumes when a complete SWPPP has been resubmitted.

c) When the Engineer authorizes the SWPPP, submit an electronic copy in Portable Document Format (PDF) or Microsoft Word (DOC) format and 4 printed copies of the authorized SWPPP.

d) If the RWQCB requires review of the authorized SWPPP, the Engineer submits the authorized SWPPP to the RWQCB for its review and comment.

e) If the Engineer requests changes to the SWPPP based on the RWQCB's comments, the Contractor shall amend the SWPPP within 10 days.

The SWPPP must comply with the Caltrans' *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual* and shall include the following:

a) Description of the work involved in the installation, maintenance, repair, and removal of temporary and permanent water pollution control practices.

b) Maps showing:

    1) Locations of disturbed soil areas

    2) Water bodies and conveyances

    3) Locations and types of water pollution control practices that will be used for each Contractor-support facility:

    4) Locations and types of temporary water pollution control practices that will be used in the work for each construction phase

    5) Locations and types of water pollution control practices that will be installed permanently under the Contract

    6) Pollutant sampling locations

    7) Locations planned for storage and use of potential nonvisible pollutants

    8) Receiving water sampling locations

c) CSMP

d) Copy of permits obtained by the Agency, including Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 certifications, aerially deposited lead variance from the Department of Toxic Substance Control, aerially deposited lead variance notification, and RWQCB waste discharge requirements for aerially deposited lead reuse.

The Contractor shall include the following items in the SWPPP:

a) For all projects:

    1) Schedule

    2) CSMP

b) For risk level 2 projects add:

    1) Adherence to effluent standards for NALs

    2) REAP

c) For risk level 3 projects add:

    1) Adherence to effluent standards for NALs and NELs

    2) REAP

The SWPPP schedule must show when:

a) Work activities will be performed that could cause the discharge of pollutants into stormwater
b) Water pollution control practices associated with each construction phase will be implemented
c) Soil stabilization and sediment control practices for disturbed soil areas will be implemented

The Contractor shall amend and resubmit the SWPPP:

a) Annually before July 15th
b) Whenever:
    1) Changes in work activities could affect the discharge of pollutants
    2) Water pollution control practices are added by Change Order work
    3) Water pollution control practices are added at the Contractor's discretion
    4) Changes in the quantity of disturbed soil are substantial
    5) Objectives for reducing or eliminating pollutants in stormwater discharges have not been achieved
    6) The Contractor receive a written notice of a permit violation for the project from the RWQCB or any other regulatory agency

The Contractor shall allow the same review time for amendments to the SWPPP as for the original SWPPP.

Construction Site Monitoring Program

A QSD must prepare the CSMP. The Contractor shall change the program to reflect current job site activities as needed. The CSMP must include the following:

a) For all projects:
    1) Visual monitoring procedures
    2) SAP for nonvisible pollutants
    3) SAP for nonstormwater discharges
    4) SAP for monitoring required by RWQCB
b) For risk level 2 projects add:
    1) SAP for pH and turbidity
c) For risk level 3 projects add:
    1) SAP for pH and turbidity
    2) SAP for temporary active treatment systems

Sampling and Analysis Plan

The SAP must comply with the Caltrans' *Construction Site Monitoring Program (CSMP) Guidance Manual*.

The Contractor shall describe the following water quality sampling procedures in the SAP:

a) Sampling equipment
b) Sample preparation
c) Collection
d) Field measurement methods
e) Analytical methods
f) Quality assurance and quality control
g) Sample preservation and labeling
h) Collection documentation
i) Sample shipping
j) Chain of custody
k) Data management and reporting
l) Precautions from the construction site health and safety plan
m) Laboratory selection and certifications

The SAP must identify the State-certified laboratory, sample containers, preservation requirements, holding times, and analytical method. For a list of State-certified laboratories go to the California Department of Public Health Web site.

The Contractor shall include procedures for sample collection during precipitation.

The Contractor shall list conditions when the Contractor's personnel will not be required to physically collect samples such as:

a) Dangerous weather
b) Flooding or electrical storms
c) Times outside of normal working hours

The Contractor shall amend the SAP whenever discharges or sampling locations change because of changed work activities or knowledge of site conditions.

The Contractor shall include procedures for collecting and analyzing at least 3 samples for each day of each qualifying rain event for a risk level 2 or risk level 3 project and shall describe the collection of effluent samples at all locations where the stormwater is discharged off-site.

Sampling and Analysis Plan for Nonvisible Pollutants

The SAP for nonvisible pollutants must describe the sampling and analysis strategy for monitoring nonvisible pollutants.

The SAP for nonvisible pollutants must identify potential nonvisible pollutants present at the job site associated with any of the following:

a) Construction materials and wastes
b) Existing contamination due to historical site usage
c) Application of soil amendments, including soil stabilization materials, with the potential to change pH or contribute toxic pollutants to stormwater

The SAP for nonvisible pollutants must include sampling procedures for the following conditions when observed during a stormwater visual inspection. The Contractor shall include a procedure for collecting at least 1 sample for each storm event for:

a) Materials or wastes containing potential nonvisible pollutants not stored under watertight conditions

b) Materials or wastes containing potential nonvisible pollutants stored under watertight conditions at locations where a breach, leak, malfunction, or spill occurred and was not cleaned up before the precipitation

c) Chemical applications occurring within 24 hours before precipitation or during precipitation that could discharge pollutants to surface waters or drainage systems, including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or nonpigmented curing compound

d) Applied soil amendments, including soil stabilization materials that could change pH levels or contribute toxic pollutants to stormwater runoff and discharge pollutants to surface waters or drainage systems, unless independent test data is available to indicate acceptable concentrations of nonvisible pollutants in the material

e) Stormwater runoff from an area contaminated by historical usage of the site that could discharge pollutants to surface waters or drainage systems

The SAP for nonvisible pollutants must provide sampling procedures and a schedule for:

a) Sample collection during the first 2 hours of rain events that generate runoff

b) Sample collection during normal working hours

c) Each nonvisible pollutant source

d) Uncontaminated control sample

The SAP for nonvisible pollutants must identify locations for sampling downstream and control samples and the reasons for selecting those locations. The Contractor shall select locations for control samples where the sample does not come in contact with materials, wastes, or areas associated with potential nonvisible pollutants or disturbed soil areas.

Annual Certification

The Contractor shall submit an annual certification of compliance as described in the Caltrans' *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual* before July 15th of each year.

Site Inspection Reports

The WPC manager must submit the following informational submittals within 24 hours of completing a weekly inspection:

a) Completed *Stormwater Site Inspection Report* form.

b) BMP status report. The WPC manager must oversee the preparation of the report. The report must include:

    1) Location and quantity of installed water pollution control practices

2) Location and quantity of disturbed soil for active and inactive areas

Visual Monitoring Reports

The Contractor shall submit visual monitoring reports for:

a) Each storm event, include:
    1) Date, time, and rain gauge reading
    2) Visual observations:
        (a) Within 2 business days before the storm for:
            (1) Spills, leaks, or uncontrolled pollutants in drainage areas
            (2) Proper implementation of water pollution control practices
            (3) Leaks and adequate freeboard in storage areas
        (b) Every 24 hours during the storm event for:
            (1) Effective operation of water pollution control practices
            (2) Water pollution control practices needing maintenance and repair
        (c) Within 2 business days after the qualifying rain event for:
            (1) Stormwater discharge locations
            (2) Evaluation of design, implementation, effectiveness, and locations of water pollution control practices including locations where additional water pollution control practices may be needed
b) Nonstormwater discharges during each of the following periods:
    1) January through March
    2) April through June
    3) July through September
    4) October through December

Use the *Stormwater Site Inspection Report* form to document visual monitoring. A visual monitoring report must include:

1) Name of personnel performing the inspection, inspection date, and date the inspection report is completed
2) Storm and weather conditions

c) Location of any:
    1) Floating and suspended material, sheen on the surface, discoloration, turbidity, odor, and source of observed pollutants for flowing and contained stormwater systems
    2) Nonstormwater discharges and their sources
d) Corrective action taken

The Contractor shall retain visual monitoring reports at the job site as part of the SWPPP.

Sampling and Analysis Day

General

The Contractor shall submit a printed copy and electronic copy of water quality analysis results, and quality assurance and quality control reports within 48 hours of field sampling, and within 30 days of laboratory analysis. Electronic copies must be in one of the following formats: (1) xls, (2) doc. The Contractor shall include an evaluation of whether the downstream samples show levels of the tested parameter that are higher than the control sample. The evaluation must include:

a) Sample identification number
b) Contract number
c) Constituent
d) Reported value
e) Analytical method
f) Method detection limit
g) Reported limit

Numeric Action Level Exceedance Reports

Whenever a NAL is exceeded, the Contractor shall notify the Engineer and submit a NAL exceedance report within 48 hours after conclusion of a storm event. The report must include:

a) Field sampling results and inspections, including:
    1) Analytical methods, reporting units, and detection limits
    2) Date, location, time of sampling, visual observations, and measurements
    3) Quantity of precipitation from the storm event
b) Description of BMPs and corrective actions taken to manage NAL exceedance

Numeric Effluent Limit Violation Reports

Whenever a NEL is exceeded, the Contractor shall notify the Engineer and submit a NEL violation report within 6 hours. The report must include:

a) Field sampling results and inspections, including:
    1) Analytical methods, reporting units, and detection limits
    2) Date, location, time of sampling, visual observation and measurements
    3) Quantity of precipitation from the storm event
b) Description of BMPs and corrective actions taken to manage NEL exceedance

Rain Event Action Plan

For a risk level 2 or risk level 3 project, the Contractor shall submit a REAP whenever the National Weather Service is predicting a storm event with at least 50 percent probability of precipitation within 72 hours.

The Contractor's WPC manager must submit the REAP at least 48 hours before a forecasted storm event.

The REAP must include:

a) Site location
b) Project risk level
c) Contact information including 24-hour emergency phone numbers for:
    1) WPC manager
    2) Erosion and sediment control providers or subcontractors
    3) Stormwater sampling providers or subcontractors
d) Storm information
e) Description of:
    1) Construction phase, including active and inactive areas
    2) Active work areas and activities
    3) Subcontractors and trades on the job site
    4) Pre storm activities including:
        (a) Responsibilities of the WPC manager
        (b) Responsibilities of the crew and crew size
        (c) Stabilization for active and inactive disturbed soil areas
        (d) Stockpile management
        (e) Corrective actions taken for deficiencies identified during pre-storm visual inspections
    (5) Activities to be performed during storm events, including:
        (a) Responsibilities of the WPC manager
        (b) Responsibilities of the crew and crew size
        (c) BMPs for maintenance and repair
f) Flood contingency measures

Storm Water Annual Report

The Contractor shall submit the storm water annual report before July 15th if construction occurs from July 1st through June 30th or within 15 days after Contract acceptance if construction ends before June 30th. Submit two (2) copies of the report. Allow 10 days for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.

The Contractor shall obtain authorization for the format of the storm water annual report. The report must include:

a) Project information such as description and work locations
b) Stormwater monitoring information, including:
    1) Summary and evaluation of sampling and analysis results and laboratory reports
    2) Analytical methods, reporting units, and detections limits for analytical parameters
    3) Summary of corrective actions taken
    4) Identification of corrective actions taken and compliance activities not implemented
    5) Summary of violations
    6) Names of individuals performing stormwater inspections and sampling
    7) Logistical information for inspections and sampling, including location, date, time, and precipitation
    8) Visual observations and sample collection records
c) Documentation of training for individuals responsible for:
    1) Permit compliance
    2) BMP installation, inspection, maintenance, and repair
    3) Preparing, revising, and amending the SWPPP

The Contractor shall submit a revised report within five (5) Working Days of receiving the Engineer's comments. The Engineer's review resumes when a complete report has been resubmitted.

When the storm water annual report is authorized, the Contractor shall submit one (1) electronic copy and two (2) printed copies of the report signed by the WPC manager.

Quality Control and Assurance

General

The Contractor shall assign trained personnel to collect water quality samples. Document the personnel and training in the SAP.

Samples taken by assigned field personnel must comply with the equipment manufacturer's instructions for collection, analytical methods, and equipment calibration.

Samples taken for laboratory analysis must comply with water quality sampling procedures and be analyzed by a State-certified laboratory under 40 CFR part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*.

Whenever downstream samples show increased levels of pollutants, the Contractor shall assess water pollution control practices, site conditions, and surrounding influences to determine the probable cause for the increase.

For a risk level 2 or risk level 3 project, the Contractor shall obtain samples of pH and turbidity as shown in the following table:

Parameter	Test method	Detection limit (min)	Unit
Turbidity	Field test with calibrated portable instrument	1	NTU
pH	Field test with calibrated portable instrument	0.2	pH units

For a risk level 3 project, the Contractor shall obtain samples and analyze the suspended sediment concentration whenever the turbidity NEL is exceeded as shown in the following table:

Parameter	Test method	Detection limit (min)	Unit
Suspended sediment concentration	ASTM D 3977	5	Mg/L

For a risk level 3 project, the Contractor shall obtain samples of pH and turbidity from representative and accessible locations upstream of the discharge point and downstream of the discharge point.

For multiple discharge points, the Contractor shall obtain samples from a single upstream and a single downstream location.

Numeric Action Levels

For a risk level 2 or risk level 3 project, NALs must comply with the values shown in the following table:

Numeric Action Levels

Parameter	Test method	Detection limit (min)	Unit	Value
pH	Field test with calibrated portable instrument	0.2	pH	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU max

Numeric Effluent Limits

For a risk level 3 project, NELs must comply with the values shown in the following table:

Numeric Effluent Limits

Parameter	Test method	Detection limit (min)	Unit	Value
pH	Field test with calibrated portable instrument	0.2	pH	Lower NEL = 6.0 Upper NEL = 9.0
Turbidity	Field test with	1	NTU	500 NTU max

	calibrated portable instrument			

The storm event daily average for storms up to the 5-year, 24-hour storm must not exceed the NEL for turbidity.

The daily average sampling results must not exceed the NEL for pH.

7-8.6.3.2 Construction.

General

The Contractor shall:

a) Obtain, install, and maintain a rain gauge at the job site. Observe and record daily precipitation.

b) Complete REAP activities, including crew mobilization, within 24 hours before precipitation occurs.

c) Continue SWPPP implementation during any suspension of work activities.

Rain Event Action Plan

The Contractor shall have the REAP at the job site at least 24 hours before a forecasted storm event. The WPC manager must submit the REAP on the following forms:

a) *Rain Event Action Plan Highway Construction Phase*

b) *Rain Event Action Plan Plant Establishment Phase*

c) *Rain Event Action Plan For Inactive Project*

The Contractor shall:

Retain a printed copy of each REAP at the job site as part of the SWPPP.

Implement the REAP, including mobilizing crews to complete activities, within 24 hours before precipitation occurs.

Sampling and Analysis Day

For a risk level 2 or risk level 3 project, the Contractor shall collect samples:

a) During a storm event for:

    1) Each nonvisible pollutant source and a corresponding uncontaminated control sample

    2) All locations identified on the *Storm Event Sampling and Analyses Plan* form

a) During a qualifying rain event for:

    1) Each nonvisible pollutant source and a corresponding uncontaminated control sample

    2) Turbidity, pH, and other constituents as required

    3) At least 3 samples for each day of a qualifying rain event

4) All locations identified on the *Qualifying Rain Event Sampling and Analyses Plan* form

The Contractor shall perform sample collection during:

a) Normal working hours

b) Each qualifying rain event

c) First 2 hours of each storm event

The Contractor shall collect receiving-water samples for a risk level 3 project and whenever a direct discharge to receiving waters occurs and NELs are violated.

The Contractor shall not physically collect samples during dangerous weather conditions, such as flooding or electrical storms.

Whenever downstream samples show increased levels of turbidity, pH, and other constituents, the Contractor shall assess water pollution control practices, site conditions, and surrounding influences to determine the probable cause for the increase.

The Contractor shall document sample collection during precipitation.

The Contractor shall retain documentation of water quality sampling and analysis results with the SWPPP at the job site. The Contractor shall upload all required reports and documentation to the State Regional Water Quality Control Board SMARTS system for City review and certification.

Storm Water Annual Report

The Contractor shall document and summarize monitoring, sampling and analysis results, laboratory reports, and training.

7-8.6.3.3 Payment. Payment for **STORM WATER POLLUTION PREVENTION PLAN (SWPPP)** shall be per the Lump Sum (LS) price bid and shall include full compensation for furnishing all labor, materials, tools, equipment to perform all the work involved in 7-8., including preparing and modifying a SWPPP, permitting fees, Agency filing and processing, furnishing, installing, maintaining and removing BMPs, monitoring and reporting, uploading and filing required documentation to the State and all incidentals for doing all the work involved as described herein or as otherwise required by the permit process, and shall be included in the contract lump sum price in the bid. No additional compensation shall be allowed therefor.

Payment will be issued by the Agency as follows:

a) 25% - upon SWPPP approval

b) 25% - upon installation of project BMPs

c) 50% - to be paid monthly as a percentage of the total working days expended for monitoring, maintenance, testing, reporting and all other requirements as outlined in these Special Provisions

7-8.6.4 Dewatering. *MODIFY to ADD the following:*

Submittals

Before the Contractor starts dewatering, he shall submit a dewatering and discharge work plan. The dewatering and discharge work plan must include:

a) Title sheet and table of contents

b) Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge point

c) Estimated schedule for dewatering and discharge start and end dates of intermittent and continuous activities

d) Discharge alternatives, such as dust control or percolation

e) Visual monitoring procedures with inspection log

f) Copy of written approval to discharge into a sanitary sewer system at least 5 business days before starting discharge activities

The Contractor shall submit the following informational submittals:

a) MSDS at least 5 business days before material is used or stored

b) Monthly inventory records for material used or stored

The Contractor shall submit written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system.

7-8.6.5 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for implementation and maintenance of BMPs and dewatering shall be included in the Contract Unit Price paid for STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

ADD:

7-8.7 Drainage Control. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.

The Contractor shall ensure that storm and drainage water does not pond due to the temporary blockage of existing drainage facilities. To this end, the Contractor shall provide temporary works that allow for the passage of storm and drainage water in a manner equivalent to the existing drainage system.

No separate payment will be made for any work performed or material used in drainage control. Full compensation for such controls shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.8 Graffiti Control. Throughout all phases of Work, including suspension of Work, and until final acceptance, the Contractor shall keep Work, all equipment, field offices,

storage facilities, fences, signs, and other facilities free of graffiti. Within twenty-four (24) hours after notification by the Agency Representative, graffiti shall be water blasted and cleaned to original surface or repainted if previously painted.

No separate payment will be made for any work performed or material used in graffiti control. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. *ADD the following before the 1st paragraph:*
Material shown on the Plans or designated in the Special Provisions which is to be salvaged or used in the reconstructed work and which has been damaged or destroyed as a result of the Contractor's operations, shall be repaired or replaced by the Contractor at his expense.

ADD:

7-9.1 Preservation of Property. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed.

All damage done to existing improvements by the Contractor shall be repaired by him to the satisfaction of the Engineer. Where sidewalks, curbs or gutters are to be repaired, the repairs shall be made by removing and replacing the damaged section back to the nearest scoring lines.

All trees and shrubbery that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities, and any other improvements of facilities within or adjacent to the work shall be protected from injury or damage, and the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operation, they shall be replaced or restored at the Contractor's expense to a condition as good as when the Contractor entered upon the work or as good as required by the Plans and Specifications if any such objects are a part of the work being performed.

The fact that any such pipe or other underground facility is not shown on the Plans shall not relieve the Contractor of his responsibility under this article. It shall be the Contractor's responsibility to ascertain the existence of any underground improvement or facilities which may be subject to damage by reason of his operations.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the work which are in any way affected by the excavations or other operations connected with the performance of the Work.

Whenever any notice is required to be given by the Agency or the Contractor to any adjacent or adjoining landowner or other party before commencement of any work, such notice shall be given by the Contractor.

ADD:

7-9.2 Video Recording and Photographing of Pre-existing Conditions. The Contractor shall video record and photograph pre-existing conditions of the project site prior to any construction activities such as, but not limited to:

a) Property markers
b) Right of way and easement conditions
c) Utility markings and USA markings
d) Existing property damages
e) Survey conditions
f) Pavement conditions, markings, and striping
g) Adjacent property conditions
h) Sidewalk, median, curb, and gutter conditions
i) Safety conditions
j) Unusual conditions or equipment
k) Existing landscape conditions (including vegetation and irrigation) along the project limit.

The Contractor shall submit recordings/photographs on CD, DVD or USB media to the Engineer no later than (five) 5 Working Days after Notice to Proceed.

Payment for video recording and photographing services shall be included in the various Bid Items and no additional compensation will be allowed therefor.

7-10.4.1.2 Work Site Safety Official. *MODIFY to ADD the following:*
Failure by the Contractor to provide the required Work Site Safety Official shall be grounds for the Agency to direct the cessation of all work activities and operations at no cost to the Agency until the Contractor is in compliance.

ADD:

7-10.4.1.3 Emergencies. Unusual conditions may arise on the Work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the Work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from failure or partly completed work.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or property interest, or prevent likely loss of human life or damage on account of

the operations under the Contract, then and in that event the Agency may provide suitable protection to said interest by causing such work to be done and material to be furnished as, in the opinion of the Agency Representative may seem reasonable and necessary.

The cost and expense of said labor and material, together with the cost and expense of such repairs as may be deemed necessary, shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefor, duly certified by the Agency Representative, then said cost and expense will be paid by the Agency and shall thereafter be deducted from any amounts due, or which may become due to the Contractor. Failure of the Agency, however, to take such precautionary measure, shall not relieve the Contractor of his full responsibility for public safety.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Agency.

7-10.4.2.1 General. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The Contractor shall submit to the Engineer, as a condition of obtaining City issued permits and in advance of excavation, a permit from the Division of Occupational Safety and Health pursuant to Chapter 6 (commencing with Section 6500) of Part 1 of Division 5 of the Labor Code along with a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five (5) feet or more in depth. The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a notice shall be included stating that the registered civil or structural engineer certifies that the plan complies with the CAL/OSHA Construction Safety Orders. A copy of the plan and permit shall be submitted to the Engineer.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work, and the Contractor shall fully comply with all local, county, state and federal laws, rules, regulations, and orders relating to safety of the public and workers.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from civil or criminal penalties resulting from a failure to comply with applicable safety laws, rules, regulations and orders. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the event of any such failure to comply with applicable safety laws, rules, regulations or orders.

The duty, if any, of the Agency Representative to conduct construction review or inspection of the Contractor's performance is not intended to include review or inspection of the adequacy of the Contractor's safety measures in, on, or near the construction site.

7-10.5.3 Steel Plate Covers. *MODIFY to ADD the following:*
The Contractor shall protect transverse or longitudinal cuts, voids, trenches, holes, and excavations in the right-of-way that cannot be properly completed within one (1) Working Day by adequately designed barricades and structural steel plates (plates) that will support legal vehicle loads in such a way as to preserve unobstructed traffic flow.

The Contractor shall secure approval, in advance, from Engineer concerning the use of any bridging proposed on the Work.

The Contractor shall adequately shore trenches to support the bridging and traffic loads.

The Contractor shall design plates for HS 20-44 truck loading in accordance with Caltrans Bridge Design Specifications Manual.

For the minimum thickness of plates refer to Table 7-10.5.3(A):

Table 7-10.5.3(A) - Trench Width/Minimum Plate Thickness

Trench Width	Minimum Plate Thickness
10"	1/2"
1'-11"	3/4"
2'-7"	7/8"
3'-5"	1"
5'-3"	1 1/4"

For spans greater than 5’-3", submit a structural design prepared by a California Registered Civil Engineer to the Engineer.

The surface of the plates shall be skid-resistant with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342.

The plates shall extend a minimum 12” beyond the edges of the trench.

Plates must provide complete coverage to prevent any person, bicycle, motorcycle or motor vehicle from being endangered due to plate movement causing separations or gaps.

Install and secure plates against movement or displacement by using adjustable cleats, shims, welding, or other devices in a manner that will minimize noise.

The Contractor shall Install plates as follows:

Mill the pavement to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Alternative installation method may be submitted in accordance with 2-5.3, “Submittals” for the Engineer’s approval.

The Contractor is responsible for maintenance of the plates and shoring, or any other approved device used to secure the plates. The Contractor shall immediately mobilize necessary personnel and equipment after being notified by the Agency Representative, the Agency Code Enforcement or Police Department of a repair needed e.g., plate movement, noise, anchors, and asphalt ramps. Failure to respond to the emergency request within 2 hours will be grounds for Agency to perform necessary repairs that will be invoiced at actual cost including overhead or $500 per incident, whichever is greater.

When plates are removed, the Contractor shall repair any damage to the pavement with fine graded asphalt concrete mix or slurry seal satisfactory to the Engineer.

Payment for Steel Plate Covers is included in the various bid items of work.

7-11 PATENT FEES AND ROYALTIES. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from all claims, suits or actions of every nature for or on account of the use of any patented materials, equipment devices, or processes. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim, suit or action.

7-13 LAWS TO BE OBSERVED. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall keep itself fully informed of all existing and future State and National laws and County and Municipal ordinances and regulations which in any manner affect those engaged or employed in the Work or the materials used in the Work or which in any way affect the conduct of the Work and of all such order and decrees of bodies or tribunals having any jurisdiction or authority in the Plans, Specifications, or Contract for the Work in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same to the Agency Representative in writing.

The Contractor shall at all times observe and comply with and shall cause all its agents, employees, and subcontractors to observe and comply with all such existing and future laws, ordinances, regulations, orders, and decrees even though such requirements may not be specifically mentioned in the specifications or shown on the Plans, and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by itself, its employees, its agents, or its subcontractors. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim or liability.

As a material part of this Contract, Contractor's and subcontractors' owners and employees agree to be bound by and adhere to the Federal Department of Transportation (DOT) regulations found in Title 49 CFR 382. All Contractor's and subcontractors' owners and employees who are required to hold commercial licenses and/or who are in safety sensitive positions shall be subject to the provisions of the DOT regulations.

ADD:

7-14.1 Property Rights in Materials. Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the Work or the soil, or after payment has been made for materials delivered to the site of the Work, or stored subject to or under the control of the Agency.

ADD:

7-14.2 Warranty of Title. No materials, supplies or equipment for the Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials,

supplies, and equipment installed and incorporated in the Work and agrees upon completion of all Work to deliver the premises together with all improvements and appurtenances constructed or placed thereon by him to the Agency free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any persons, firm, or corporation furnishing any material or labor for any work covered by the Contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the Agency.

The provisions of this subsection shall be physically inserted in all subcontracts and material contracts and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

ADD:

7-15 CONTRACTOR'S RESPONSIBILITY FOR THE WORK. Until Acceptance of the Work, the Contractor shall have the responsibility, charge and care of the Work and of the materials to be used therein (including materials for which it has received partial payment or materials which have been furnished by the Agency) and shall bear the risk of injury, loss or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work.

The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the material occasioned by any cause before its completion and acceptance and shall bear the expense thereof. Where necessary to protect the work or materials from damage, the Contractor shall at his expense provide suitable drainage and erect such temporary structures as are necessary to protect the work or materials from damage. The suspension of the work from any cause whatever shall not relieve the Contractor of his responsibility for the work and materials as herein specified. If ordered by the Agency Representative, the Contractor shall at his expense properly store materials which have been partially paid for by the Agency or which have been furnished by the Agency. Such storage by the Contractor shall be on behalf of the Agency, the Agency shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored, except on written authorization from the Agency.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act as though instructed to do so by the Agency.

ADD:

7-16 PROJECT RECORD DOCUMENTS.

7-16.1 Maintenance of Documents and Samples. The Contractor shall maintain one record copy of:

a) Contract Drawings
b) Specifications
c) Addenda
d) Change Orders and Other Modifications to the Contract
e) Reviewed Shop Drawings, Product Data, and Samples
f) Field Test Records
g) Construction Schedules
h) Manufacturer's Certificates

The Contractor shall maintain documents in clean, dry, legible condition and not used for construction purposes.

The Contractor shall keep Record Documents and samples accessible for inspection by Agency Representative. Applications for partial payment will not be approved if the Record Documents are not kept current. The Agency Representative must so verify prior to submittal of each Application for Payment.

ADD:

7-16.2 Recording. The Contractor shall record changes to the plans and discoveries of buried objects at the Work on Record Documents with red ball-point pen, label each Document “PROJECT RECORD” in large printed letters, record information concurrently with construction progress, not conceal any work until required information is recorded and legibly mark each item on Contract Drawings and Shop Drawings to record actual construction, including:

a) Measured depths of elements in relation to fixed datum point
b) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
c) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction
d) Field changes of dimension and detail
e) Changes made by Contract modifications
f) Details not on original Contract Drawings
g) Previously unknown buried objects

The Contractor shall legibly mark each item to record actual construction, including:

a) Manufacturer, Trade Name, and Catalog Number of each product actually installed, particularly optional items and substitute items
b) Changes made by Addenda or modifications

The Contractor shall maintain other documents per requirements of individual specifications sections.

7-16.3 Submittals. At Contract closeout the Contractor shall deliver Record Documents and samples as specified in 7-16.1. Request for final payment will not be approved until all Record Documents have been delivered.

The submittals shall be transmitted with cover letter with signature of Contractor or authorized representative, listing date, project title and number and number and title of each Record document.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

DELETE in its entirety, not part of this project.

SECTION 9 - MEASUREMENT AND PAYMENT

REVISE as follows:

9-2 LUMP SUM WORK. *DELETE 2nd paragraph in its entirety.*

ADD:

9-2.1 Detailed Schedule. The Contractor shall furnish the Agency a cost break-down for all contract lump sum items. Cost break-down tables shall be submitted to the Agency Representative for acceptance within fifteen (15) days after award of Contract. Cost break-down tables will be approved, in writing, by the Agency Representative before any partial payment will be made for the applicable items involved.

The Contractor shall determine the quantities required to complete the Work shown on the Plans. The quantities and their values shall be included in the cost break-downs submitted to the Agency Representative for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-downs submitted for approval.

The sum of the amounts for the line items of work listed in each cost break-down table for each lump sum item shall be equal to the contract lump sum price bid. Overhead and profit shall be included in each individual line item of work listed in a cost break-down table.

No adjustment in compensation will be made in the contract lump sum prices due to differences between the quantities shown in the cost break-downs furnished by the Contractor and the quantities required to complete the Work as shown on the plans and as specified in the Special Provisions.

Individual line item values in the approved cost break-down tables will be used to determine partial payments during the progress of the Work and as the basis for calculating an adjustment in compensation for the contract lump sum items due to changes in line items of work ordered by the Engineer. When the total of ordered changes to line items of work increases or decreases the lump sum price bid by more than twenty-five percent , the adjustment in compensation for the applicable lump sum item will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 3 of the Standard Specifications and the Special Provisions.

9-3 PAYMENT.

9-3.1 General. *ADD the following at the end of the 2nd paragraph:*
The cost of items of work not listed in the “Schedule of Work and Prices” in the Bidders Proposal shall be considered to be included in the cost of the other work that is listed and no additional compensation will be allowed therefor.

When an item of work is designated as (F) or (S-F) in the “Schedule of Work and Prices”, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity

of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) or (S-F) in the “Schedule of Work and Prices” shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the “Schedule of Work and Prices” for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the “Schedule of Work and Prices.”

ADD:

9-3.1.1 Application for Payment. The Contractor shall use the City of Irvine Certified Invoice for Progress Payment Form; furnished to the Contractor.

The Contractor shall type the required information, follow the schedule of work and bid prices in accepted Bidder's proposal for unit price contract, execute certification by signature of an authorized officer, use data on accepted Schedule of Values for lump sum work, provide dollar value in each column for each line item for portion of work performed, list each authorized Change Order number and dollar amount and adjusted Contract Price, and obtain the Agency Representative concurrence on invoiced amounts prior to submittal for payment.

The Contractor shall follow the following submittal procedures: Submit original and one (1) copy of each Application for Payment at times stipulated in 9-3.2; submit under transmittal letter; include submittal date, project title and number and submit updated Progress Schedule with Application for verification of progress. Incomplete application for payment will be rejected.

When Agency Representative requires substantiating information, the Contractor shall submit data justifying line item amounts in question.

The Contractor shall provide one copy of data with cover letter for each copy of submittal, show application number and date, and line item by number and description.

9-3.2 Partial and Final Payment. *DELETE in their entirety 1st and 2nd paragraphs and SUBSTITUTE with the following:*
Payment for services will be made monthly on approved invoices, with payment terms of net thirty (30) days upon receipt of invoice. The Contractor shall submit invoices within fifteen (15) days from the end of each month on the form (Certified Invoice For Progress Payment) provided by the Agency. This estimate shall include the value of the total amount of the work completed by the Contractor during the calendar month previous to that in which the estimate is made.

When the Work has been completed to the satisfaction of the Engineer, the Contractor shall make a final estimate of the total amount of work done thereunder and the amount to be paid therefor under the terms of the Contract and shall certify to the Agency the amount of the final estimate. If the Agency finds the Work has been completed according to the Contract, the Agency will accept the work, will file a notice of completion, and will pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be retained under the provisions of the Contract and upon receiving signed unconditional releases upon final payment from all subcontractors and material suppliers. All prior progress estimates and payments shall be subject to correction in the final estimate and payment. The project retention release will not be due and payable until the expiration of the 60 days from the date of filing a notice of completion of the Work by the Agency.

Interest penalties are not required on payment delays due to disagreement between the Agency and Contractor over the payment amount or other issues involving contract compliance.

It is mutually agreed between the parties to the Contract that no certificate given or payment made under the Contract shall be conclusive evidence of performance of the Contract and no payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor further agrees that the payment and acceptance of the final amount due under the Contract shall release the Agency, the Agency Representative, the Engineer, and their consultants from any and all claims or liability arising out of the Contract.

ADD:

9-3.2.1 Agency's Right to Withhold Certain Amounts and Make Application Thereof. In addition to the amount which the Agency may retain under the above article on progress payments, the Agency may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor as in the Agency's judgment may be necessary to cover:

a) Payments which may be past due and payable for just claims against the Contractor or any subcontractors for labor or materials furnished in or about the performance of the Work on the project under this Contract.

b) Estimated or actual costs for correcting defective work not remedied.

c) Amounts claimed by the Agency as forfeiture due to delay or other offsets.

d) Any other amounts the Agency is authorized to withhold under the Contract Documents or under applicable law.

The Agency may apply such withheld amount or amounts to the payment of such claims in its discretion. In so doing, the Agency shall be deemed the agent of the Contractor and any payments so made by the Agency shall be considered as a payment made under the Contract by the Agency to the Contractor, and the Agency shall not be liable to the

Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Agency will render to the Contractor a prior account of such funds disbursed in behalf of the Contractor.

ADD:

9-3.2.2 Substitution of Securities. Upon the Contractor's request, the Agency will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code Section 22300 if the Contractor deposits in escrow with a bank acceptable to the Agency, securities eligible for the investment of State funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

a) The Contractor shall bear the expense of the Agency and the Escrow Agent in connection with the escrow deposit made.

b) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts of retention to be paid to the Contractor pursuant to this section.

c) The Contractor shall enter into an escrow agreement satisfactory to the Agency, such agreement shall include provisions governing inter alia;

    1) The amount of securities to be deposited,

    2) The providing of powers of attorney or other documents necessary for the transfer of the securities to be deposited,

    3) Conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to, termination of the Contractor's control over the Work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the Contract,

    4) Decrease in value of securities on deposit, and

    5) The termination of the escrow upon completion of the Contract.

d) The Contractor shall obtain the written consent of the surety of such agreement.

9-3.4 Mobilization *DELETE in its entirety and SUBSTITUTE with the following:*

9-3.4.1 General. Mobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, materials and incidentals to the project site necessary for work on the project and for all other work and operations which must be performed or costs incurred including bonds, insurance, and financing prior to beginning work on the various contract items on the project site.

Mobilization shall also include the cost, time and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition and all other related work as required for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from Agency's Representative.

9-3.4.2 Measurement and Payment. Mobilization is eligible for partial payment if the Contract includes a bid item for mobilization. Payment for **MOBILIZATION** shall be per the **Lump-Sum (LS)** price bid and shall include obtaining and paying for all permits and business licenses as required from the City of Irvine, State of California and other agencies. The City of Irvine will waive its permit fee. The Contractor shall comply with the requirements specified by each license or permit. No payment for Mobilization will be made until the Contractor's Construction Schedule has been submitted, reviewed and accepted and is current. Progress payments for this item shall be paid in accordance with the percentage completion of the project, and shall include the costs of such mobilization and administration for the entire contract period including construction schedule as specified in these specifications. Payments shall be made upon the basis of the following:

a) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is the lesser, will be included in the estimate for payment.

b) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization or 7.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

c) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 95 percent of the contract item price for mobilization or 9.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

d) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization or 10 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

e) Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount shall be paid.

ADD:

9-4 RESOLUTION OF CONSTRUCTION CLAIMS. Any claims submitted by the Contractor against the Agency for Work covered by this Contract in the amount of $375,000 or less shall be subject to the procedures specified in Public Contract Code § 20104, *et seq*.

ADD:

9-5 PROMPT PAYMENT. In addition to requirements specified elsewhere, the following shall also apply: Subsection (f) of Section 20104.50 of the Public Contract Code, Article 1.7 of Part 3 of Division 2.

ARTICLE 1.7

§ 20104.50 Timely progress payments; legislative intent; interest; payment requests:

a) It is the intent of the Legislature in enacting this section to require all local governments to pay their Contractors on time so that these Contractors can meet their obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is instead a matter of statewide concern.

b) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

c) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

d) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

    1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

    2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request in not proper.

e) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subsection (c).

f) For purposes of this article:

    1) A "local agency" includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

    2) A "progress payment" includes all payments due Contractors, except that portion of the final payment designated by the Contract as retention earnings.

    3) A payment request shall be considered properly executed if funds are available for payment for the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

g) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

PART 2 - CONSTRUCTION MATERIALS

SECTION 200 – ROCK MATERIALS

200-1 ROCK PRODUCTS

200-1.4 Coarse Aggregate for Portland Cement Concrete. *ADD the following:*

The Cleanness Value requirement of Section 200-1.4 shall be replaced with the following:

Tests	Test Method No.	Requirements
Sand Equivalent	California 227	
Individual Test		70 Min*
Moving Average		75 Min*

200-1.5 Sand.

200-1.5.3 Sand for Portland Cement Concrete. *DELETE the sand equivalent requirement and replace with the following:*

Tests	Test Method No.	Requirements
Sand Equivalent	California 217	
Individual Test		70 Min*
Moving Average		75 Min*

* For 2500 or less class concrete, except concrete pavement, a minimum 65 Individual Test Result and a minimum 70 Moving Average will be acceptable if 17 mpa (2500 psi) 28-day strength criteria of Section 201-1.1.4 are met, at 150 mm (6”) slump or greater. The EMA Materials Laboratory will make the testing and acceptance determination.

Evaluation of Sand Equivalent and Cleanness Value shall conform to the provisions of Subsection 400-1.4.

200-2 UNTREATED BASE MATERIAL.

200-2.1 General. *ADD the following:*

Untreated base shall be Crushed Aggregate Base conforming to the requirements of Subsection 200-2.2 or shall be Class 2 Aggregate Base complying with the Caltrans Standard Specifications, Section 26-1.02B.

200-2.2 Crushed Aggregate Base. *DELETE footnote number 1 of Table 200-2.2.3 and replace with the following:*

The minimum R-value requirement will not be waived.

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS

REVISE as follows:

201-1 PORTLAND CEMENT CONCRETE.

201-1.1 Requirements.

201-1.1.1 General. *ADD the following:*

Prior to the start of construction, the Contractor shall furnish to the Engineer laboratory data for the particular mix design he will use. The data will include the following:

A. A detailed concrete mix design including the type and amount of cement used; complete gradation and source of the aggregate used; the amount of water used and any proposed admixtures.

B. Flexural strength test data for the same batch of concrete used in "A" above showing the compressive strength of the concrete at 3, 7, and 28 days.

DELETE the third paragraph and replace with the following:

No admixtures will be allowed unless approved in advance by the Engineer.

DELETE the fourth paragraph and replace with the following:

No rapid-hardening cement or reclaimed concrete material may be used.

201-1.1.2 Concrete Specified by Class and Alternate Class. *ADD the following to Table 201-1.1.2:*

Headwall, Concrete Class 560-C-3250

ADD the following:

The following concrete mix designs shall be used for the various corresponding flatwork:

Curb and Gutter and Sidewalk 520-C-3250

Concrete for Utility Adjustments 660-C-3750

201-1.2 Materials.

201-1.2.1 Portland Cement. *ADD the following:*

All cement to be used or furnished on this Project shall be Type V Portland Cement conforming to ASTM C150.

201-1.2.4 Chemical Admixtures. *DELETE Subsection in its entirety and replace with the following:*

No admixtures will be allowed unless approved in advance by the Engineer.

201-2.6 Reclaimed Concrete Material. *DELETE Subsection in its entirety and replace with the following:*

No reclaimed concrete material will be allowed.

201-1.4 Mixing.

201-1.4.1 General. *ADD the following to the end of the section:*

Mixed concrete delivered to the site shall be by Transit Mixer as called for in Section 201-1.4.3 “Transit Mixer” of the Standard Specifications.

201-2 REINFORCEMENT FOR CONCRETE.

201-2.2.1 Reinforcing Steel. *REVISE first paragraph of this SECTION as follows:*

All reinforcing steel for reinforced concrete construction shall be Grade 60 billet steel conforming to ASTM A-615.

SECTION 202 – MASONRY MATERIALS

Masonry materials for retaining walls shall conform to the applicable portions of Section 58-2 of the Caltrans Standard Specifications, 2015 Edition.

SECTION 203 – BITUMINOUS MATERIALS

203-5 SLURRY SEAL.

203-5.1 General. *REPLACE the first sentence with the following:*

Slurry seal shall be quick-set Type II emulsion aggregate slurry (EAS) with the addition of 2.5% latex.

203-6 ASPHALT CONCRETE.

203-6.1 General. *ADD the following:*

Asphalt Concrete base course and leveling course shall be ¾” maximum aggregate Type III-B2-PG 64-10 per Section 203-6.5 of the Standard Specifications

Asphalt Concrete surface course shall be ½” maximum aggregate Type III-C2-PG 64-10 per Section 203-6.5 of the Standard Specifications

SECTION 207 – GRAVITY PIPE

207-2 REINFORCED CONCRETE PIPE (RCP).

207-2.1 General. *ADD the following:*

The Contractor shall furnish a detailed "pipe layout diagram" to the City prior to the pre-construction meeting. Said diagram shall list all main line and lateral pipe, D-load classification, stations of junctions / BC's / EC's / angle points, sections of pipe, length of sections, type of section (straight, horizontal curve bevel, vertical curve bevel, etc.) and other relevant information required to properly plan and construct the proposed storm drain RCP improvements.

207-2.5 Joints. *DELETE the first 2 paragraphs and REPLACE with the following:*

All RCP joints shall be rubber-gasketed (water-tight) type. The Contractor shall submit a joint detail to the Engineer, for review and approval, prior to manufacturing the RCP.

207-2.8 Cause for Rejection. *ADD the following before the last paragraph:*

Various lots of pipe may be inspected and tested at the manufacturing plant by the Public Works Department or by an approved testing laboratory.

All pipe delivered to a City of Irvine project shall have a manufacturer's certificate of compliance furnished at the time of delivery.

Any pipe delivered to the job site without prior inspection shall be inspected upon delivery and subjected to acceptance or rejection as a result of that inspection.

Any damage to the pipe from shipping or handling, such as any broken ends with exposed steel, cracks or breakage due to mishandling, may be cause for rejection of the pipe even after delivery to the job site.

SECTION 210 – PAINT AND PROTECTIVE COATINGS

ADD the following:

Materials shall conform to the provisions of Section 84, "Markings", of the California Department of Transportation Standard Specifications (2015) and these Special Provisions.

SECTION 214 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS AND PAVEMENT MARKERS

ADD the following:

Materials shall conform to the provisions of Section 82, "Signs and Markers", and Section 84, "Markings "of the Caltrans Standard Specifications, 2015 edition, and these Special Provisions.

ADD the following:

Signing and Striping General Notes

1. SIGNING AND STRIPING SHALL CONFORM TO PART 2 SIGNS & PART 3 MARKINGS OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) 2014 EDITION, AND ANY ADDENDUMS THERE TO OR LATEST EDITION, THESE PLANS AND SPECIAL PROVISIONS.

2. DETAIL 9 LANE LINE STRIPING PATTERN IN PART 3 MARKINGS SHALL BE USED ON ALL MULTILANE STREETS REGARDLESS OF STREET DESIGN SPEED

3. PAVEMENT LEGENDS SHALL MATCH THE CITY STENCILS (HAWKINS STENCILS OR EQUIVALENT).

4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED AND APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.

5. ALL CONFLICTING STRIPINGS, PAVMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO INSTALLATION OF NEW STRIPING. ALL CONFLICTING RAISED PAVEMENT MARKERS SHALL BE REMOVED.

6. PAVEMENT THAT IS DAMAGED DUE TO REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY INSPECTOR.

7. THE CONTRACTOR SHALL CONTACT THE CITY OF IRVINE INSPECTION SERVICES FOR INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.

8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. IF CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON THESE PLANS, THE CITY OF IRVINE INSPECTION SERVICES SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.

9. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.

10. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6 - TEMPORARY TRAFFIC CONTROL OF THE CA MUTCD 2014 EDITION, -ANY ADDENDUMS THERE TO OR LATEST EDITION AND ALL O.S.H.A. REQUIREMENTS.

11. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL CONSTRUCTION SIGNS, DELINEATORS, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.

12. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL SIGNS, DELINEATORS, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC WHILE WORKING IN THE STREET.

13. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONALTRAFFIC CONTROL DEVICES REQUIRED BY THE CITY INSPECTOR / REPRESENTATIVE TO ASSURE PUBLIC SAFETY AT ALL TIMES.

14. THE CONTRACTOR SHALL UTILIZE A FLAGMAN DURING CONSTRUCTION WORK AS DEEMED NECESSARY BY THE CITY INSPECTOR.

15. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURE ON ARTERIAL STREETS.

16. STRIPING SHALL BE CAT TRACKED AND APPROVED BY THE CITY INSPECTOR PRIOR TO FINAL INSTALLATION.

17. CROSSWALK SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN NO. 203.

18. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.

19. ALL SIGN POSTS SHALL BE 4”X4” REDWOOD STAINED “IRVINE BROWN” PER THE CITY OF IRVINE REQUIREMENTS. CITY OF IRVINE SPECIAL SIGN R26EB SIGN SHALL BE INSTALLED ON “U” CHANNEL POST OR ON STREET LIGHT POLE.

20. ADVANCED STREET NAME SIGNS AND STREET NAME SIGNS SHALL BE SILVER LETTERS WITH “IRVINE BROWN” BACKGROUND.

21. BLUE RAISED REFLECTIVE PAVEMENT MARKER SHALL BE INSTALLED ADJACENT TO ALL EXISTING FIRE HYDRANTS IN ACCORDANCE WITH CA MUTCD 2014 EDITION.

REVISE as follows:

214-4 PAINT FOR STRIPING AND MARKINGS.

214-4.1 General. *MODIFY to ADD the following:*
All paint, beads, and other materials used in painting traffic stripes and markings shall conform to the requirements of the State Standard Specifications, Section 84 and all other applicable sections. Certificates of Compliance for each material shall be submitted prior to use on this Contract.

214-6 PAVEMENT MARKERS. *MODIFY to ADD the following:*
All pavement markers, and other materials used in painting traffic stripes and markings shall conform to the requirements of the State Standard Specifications, Section 81, Section 84 and all other applicable sections. Certificates of Compliance for each material shall be submitted prior to use on this Contract.

214-6.1 Types of Markers. *MODIFY to ADD the following:*
Reflective pavement markers shall conform to the following:

a) Type B, 2-Way Clear Reflective Markers shall be Model 290-2W as manufactured by 3M Company or approved equal.

b) Type C, 2-Way Red-Clear Reflective Markers shall be Model 290-WR as manufactured by 3M Company or approved equal.

c) Type D, 2-Way Yellow Reflective Markers shall be Model 291-2Y as manufactured by 3M Company or approved equal.

d) Type G, 1-Way Clear Reflective Markers shall be Model 290-W as manufactured by 3M Company or approved equal.

e) Type H, 1-Way Yellow Reflective Markers shall be Model 291-Y as manufactured by 3M Company or approved equal.

f) Type I, Blue - 2-Way Blue Reflective Markers shall be Model 295-2B as manufactured by 3M Company or approved equal.

ADD the following Section:

SECTION 215 – STORMWATER BIORETENTION SYSTEM

215-1 GENERAL. Bioretention System shall be by **Contech Engineering Solutions LLC**, 950 S Coast Drive, Suite 145, Costa Mesa, CA 92626, Phone: 714-281-7883, www.contechES.om, or approved equal, and shall consist of a precast Filterra® Unit, standard configuration. The Contractor shall submit in advance to the Engineer for approval the manufacturer's drawings prior to placing any bioretention system.

Said bioretention unit shall have the expected pollutant removal rates as shown on Table 215-1 from water flowing into the curb inlet during low flows (first flush).

Table 215-1 Expected Average Pollutant Removal Rates

TSS Removal	85%
Phosphorus Removal	60% - 70%
Nitrogen Removal	43%
Total Copper Removal	>58%
Dissolved Copper Removal	46%
Total Zinc Removal	>66%
Dissolved Zinc Removal	58%
Oil & Grease	>93%

SECTION 217 – BEDDING AND BACKFILL MATERIAL

217-1 GENERAL
Bedding and backfill material for pipes shall be in conformance with Section 217 of the Standard Specifications and these Special Provisions.

217-2 PAYMENT. There will be no additional payment for bedding and backfill material. It will be considered incidental to the price of the relevant pipe section.

ADD the following Section:

SECTION 218 – TRAFFIC SIGNING

215-1 GENERAL.

All equipment, materials, and components for traffic signing and the installation thereof shall conform to the Caltrans Standard Plans, 2015 Edition, and Caltrans Standard Specifications, Section 56-2, "Roadside Signs", 2015 Edition, except as noted on the Plans and in these Special Provisions.

All signs shall be aluminum panel not less than 0.080 inch thick, 6061-T6 or 5052-H38 Alloys, exceptions are Type L, K and street name signs which shall be 0.063 inch thick, radius corners 3/8 inches. Aluminum base metal shall be cleaned, deoxidized, and coated with a light tightly adherent chromated conversion coating free of any powdery residue.

All sign facings shall be manufactured of high intensity grade encapsulated lens sheeting (Hi-Intensity or equal) except for R26 signs which shall be Engineering Grade material (enclosed lens). All signs which could result in a moving violation shall be high intensity.

All new signs to be installed shall be in the international symbols (if available) unless otherwise specified.

The date of installation of a sign is to be embossed on the back of the sign and shall be considered as the start of the warranty; period. "Property of City of Irvine" shall also be embossed on the back of the sign.

Post materials shall consist of the following: 6', 8' or 11' U-channel posts, 6'Guide posts, Eze-Erect sign post (break away), 5/16", 2" through 4" carriage bolts, 5'16" x 1/2" through 1" hex bolts, 5/16 " nuts, 5/16"x ¾" and 1" anti-theft bolts, and anti-theft nuts, P.C. 2.5 aluminum sign caps, P.C. 1 aluminum sign saddles, 5/8" x 20-1/2" carriage bolts, 5/8" nuts, 2 ½" and 2" clamp on U-bracket, Gerrard bracket, ¾" 201 stainless steel buckles, ¾", 030, 201 stainless steel banding, side arm bracket, heavy duty channel iron, galvanized sign braces, galvanized 3/16" x 1"x 30". 5/16" x 1" fiber or nylon washers behind a 5/16" x 1" or 1-1/4" metal washer shall be used on the face of all high-intensity signs.

All posts installed on median in asphalt or concrete shall have break-away braces.

For installation of signs that are 36’ or larger and/or sign combinations, a brace is used for strength (3/16” x 1” x 30” or 36” brace).

All signs shall be standard size and color as specified in the California Department of Transportation Traffic Manual unless otherwise specified by Traffic Engineering.

Median noses shall be treated as follows:

a. All median noses shall be painted with yellow reflective traffic paint BCR to ECR.
b. Median openings of 60’ or less shall use treatment “a” listed above.
c. Median openings of 50’ to 100’ shall use treatment “a” listed above and a type “K” marker.
d. Median openings over 100’ and intersection shall use treatment “a” listed above and an R7. If another sign is posted on a median nose, do not post R7.

PART 3 - CONSTRUCTION METHODS

SECTION 300 – EARTHWORK

REVISE as follows:

300-1 CLEARING AND GRUBBING.

300-1.1 General. *ADD the following:*

1. Demolition and removal of existing turf, existing shrubs, trees and groundcovers at the median islands and elsewhere as needed to complete the construction as indicated on the Plans. Scrape off turf at finished grade and dispose of offsite. All items noted for removal shall become the property of the Contractor unless otherwise noted.

2. All items to be removed shall be verified by the inspector prior to demolition. The contractor shall meet with the inspector prior to clearing and grubbing.

3. All items to be removed shall be marked by the contractor prior to inspection and removal.

4. Removal, hauling and disposal of existing guard posts, locations as indicated on the plans.

5. Removal, hauling and disposal of existing retaining wall adjacent to utility vaults, at approximate Stations 137+00, 142+00, 149+00 and 167+50, as indicated on the plans.

6. The Contractor shall exercise extreme caution while excavating due to underground utilities. Call dig alert for verification before digging. Work may require alternate less efficient means and methods in order to protect utilities.

7. The Contractor shall protect in place all trees and shrubs, unless indicated otherwise on the demolition plan. Contractor shall repair turf, curbs, signs, shrubs, or trees damaged due to contractors operations.

8. All demolition, unless shown as salvaged and construction debris shall be removed from the site and delivered to a legal recycler dump site. Contractor to provide receipts for dumping or recycling sites fees.

9. Dust shall be controlled by watering.

10. All existing drainage structures on site shall be protected with filter fabric and gravel bags during demolition and through the construction period. Contractor will remove filter fabric and gravel bag covers prior to each storm event and replace immediately afterward.

300-1.1.1 Turf Kill *ADD in its entirety:*

Turf kill:

1. Contractor shall spray weed killer on turf areas to removed.
2. After 7 days, remove turf
3. Irrigate with ½" water and wait 7 days
4. Spray second application of weed killer on turf areas
5. No plant material can be installed within 24 hours of weed killer application.

300-1.1.2 Prune/Remove Existing Roots *ADD in its entirety:*

All roots shall be cut clean with a mechanical root cutting machine designed for such purposes, a sharp saw / or hand pruners. Trenching machines, backhoes, and axes are not allowed in root pruning operations. Trenching around existing trees and roots shall be done by hand without the use of power tools unless specifically directed by the City.

No more than ¼ the tree's root system shall be removed without permission from the City Arborist.

Root barriers shall be furnished and installed at each tree planted adjacent to concrete and asphalt. Root Barriers must be installed vertically along the sidewalk, roadway or alley at the direction of the City. The root barrier must be positioned properly so that the upper edge is at least a minimum of one (1) inch below the finished grade. Root barriers shall extend for eight feet (8') minimum distance from the trunk of the tree in each direction.

Root pruning on the surface roots shall only occur if the surrounding surface cannot be raised and with the approval of the City. No root pruning shall occur within 5' of the root ball crown without the approval of the City.

300-1.1.3 Tree Protection *ADD in its entirety*

The Contractor shall not store materials, or operate heavy equipment, or vehicles within (10) feet of trunks of existing trees to remain. The Contractor shall not operate heavy equipment within ten (10) feet of trunks of existing trees.

300-1.1.4 Tree Removal *ADD in its entirety*

Tree removal of any caliper size shall conform to the requirements of section 300-1 of the Standard Specifications.

Trees within the project limits that are designated for removal are shown in the "University Drive Road Widening Tree Evaluation Report, prepared by Arborgate Consulting, Inc, see Appendix G.

300-1.1.5 Median Concrete Paving

The Contractor shall remove existing concrete paving with in median island where designated.

300-1.3 Removal and Disposal of Materials

300-1.3.1 General. *After the last paragraph, ADD the following text:*

All soils and materials are subject to testing by the City.

300-1.3.2 Requirements. *after paragraph a), ADD the following text:*

Contractor shall scan the work area using a metal detector of adequate strength prior to any saw cutting, excavation or cold planing of the existing pavement. Contractor shall be responsible for locating and protecting manhole, water valve, utility access frames and covers or other metal appurtenances buried below the existing pavement surface whether shown on the plans or not.

All existing asphalt concrete pavement that is to be joined by new construction shall be sawcut in a straight line. The Contractor shall not disturb or damage existing improvements to be protected in place. Any damage done by Contractor and/or its equipment shall be repaired or replaced as called out in Section 7-9 of the Standard Specifications at Contractor's expense. The Contractor shall call Underground Service Alert of Southern California [USA] at 811 prior to excavation and shall "pothole" existing utilities as necessary or as required by Utility Owner to determine their depth to avoid damaging said utilities.

AC pavement shall be saw cut to full depth around entire join perimeter. Removal of existing pavement sections shall be to the depth required for construction of the replacement roadway sections as shown on the plans and will include the removal of existing AC pavement, cement treated base and/or aggregate base. All removed material becomes the property of the Contractor and shall be hauled away and legally disposed of properly outside of the roadway right of way.

Contractor shall remove slurry/asphalt concrete buildup on the existing gutter lip to the satisfaction of the owner's representative.

No crushing operations by Contractor will be allowed at the job site or within the Irvine City limits. Contractor shall price the unclassified excavation and other related bid items accordingly.

after paragraph c), ADD the following text:

The following items of work are included in concrete pavement excavation:

- Saw-cutting, removal and disposal of existing concrete curb and gutter sidewalk, and cross gutter within the project site and as shown on the plan or directed by the Engineer, and in addition, 1- foot full-depth AC pavement removal adjacent to the proposed concrete improvements.

- Removal of excess spoil from AC milling, excavation, disposal of debris, shrubs, rubbish and excess material away from site and disposal and payment of all required fees at a licensed disposal site.

- Maintaining dust control at all times by watering.

- Removal and disposal of any additional items not specifically mentioned herein, which may be found within the work limits or are shown on the plans to be removed.

- At the direction of the Construction Manager, Contractor may be required to demolish and remove one (1) or more directional 8’ x 12’ outdoor location signs including posts and footings.

- Removal and disposal of unnamed concrete improvements.

- Restoration and clean-up of the site.

- Providing for traffic control and maintenance of access, security and safety including signs, barricades, flashers, covers, plates and chain link fencing as specified elsewhere in these specifications.

- Protecting in place of existing improvements and utilities.

- Providing all necessary means to avoid tracking of asphaltic material on existing or new asphalt pavement during paving operations including landscaped and hardscaped facilities.

- Removing and relocating all sprinkler lines, heads, valves, etc. interfering with construction of improvements where new sidewalk is constructed (not including those called out to be removed in the media).

Removal and replacement of curb or curb and gutter shall be minimum 8 feet in length and shall span beyond any existing crack or to any joint within 8 feet of the minimum length span. If joins between existing and replaced spans are made with a dowel epoxied in place or with an epoxy joint, then the existing adjacent minimum length to crack or joint may be reduced to 3 feet.

All materials removed will be lawfully disposed of at a site secured by the Contractor. The Contractor will make every effort to recycle excavated and demolition materials. The Contractor will provide the Engineer with a letter indicating the final disposition of all excavated and demolition materials from the project within five (5) working days after project completion.

No excavated or demolition materials will be left in the public right of way overnight without AGENCY approval.

All existing improvements to be joined shall be cut in a clean straight line along the join line by use of a concrete cutting saw. Compensation for this requirement shall be considered as included in the price bid in the proposal form and no additional compensation will be allowed therefor.

Sawcutting shall consist of cutting existing Portland cement concrete and Asphalt Concrete to facilitate its removal. Cutting shall be accomplished by the use of a power driven saw. The depth of the cut shall be deep enough to provide a clean, straight break without loosening, cracking, or damaging adjoining asphalt or concrete. Under this item,

the use of a grinder will not be allowed in lieu of power-driven saw. Residue from sawcutting shall be vacuumed up while sawcutting.

after paragraph c), ADD the following sub-section:

d) Trees. All trees called out for removal shall be removed and disposed of per the standard specifications, City of Irvine Standards and per the direction of the City Engineer.

The stumps and roots shall be ground down a minimum three (3) feet below the planned sidewalk subgrade. Any stump grindings strewn on the street or sidewalk shall be removed and placed on the grass area around the stump hole by the contractor before leaving the site. The contractor shall place a barricade in each hole before leaving the site.

All twigs, branches, chips and other debris caused by the removal shall be immediately cleaned up before moving to a new location.

All equipment to be used and all work to be performed must be in full compliance with the most current revision of American National Standards Institute, Standard Z-133.1 (Safety Requirements for Pruning, Trimming, Repairing, Maintaining, Removing Tress and for Cutting Brush).

This work item shall also include all necessary import, fill and compaction of material to bring the existing ground of to the necessary finished surface or subgrade level.

300-1.4 Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **CLEARING AND GRUBBING** shall be made at the contract unit price bid per **Acre (AC),** as field measured and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to excavation, demolishing, removal and disposal of existing materials as required by the contract documents, sign relocation, replacement of grass, sprinkler modification or relocations within the driveway areas, excavation and disposal to complete the removal of existing concrete stairs and v-ditch to box inlet at the southeast corner of the intersection of University Drive and California Avenue, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor. This bid item shall also include payment for all removals required within the project limits that are not paid for by a separate contract bid item and no additional compensation will be allowed therefor. **Contractor shall submit a base line schedule to the Engineer for this bid item at commencement of the project.**

Measurement and Payment for **ROADWAY EXCAVATION** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured, undisturbed, in place, calculated using the average end area method and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to excavate AC pavement from existing northerly edge of shoulder striping to existing southerly edge of shoulder striping, including excavation of temporary 4-inch

thick AC paved median as indicated on the project stage construction plans, saw cutting and removal of aggregate base excavation, compaction, haul away, and disposal to complete the removal, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE CONCRETE CURB AND GUTTER** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting and disposal to complete the removal, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE AND CONSTRUCT DEPRESSED CONCRETE CURB AND GUTTER** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting and disposal to complete the removal, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE CONCRETE MEDIAN CURB** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, removals, haul away and disposal of existing concrete curb and adjacent asphalt within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE CONCRETE CURB RAMP** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting and disposal to complete the removal of the existing curb ramp from BCR to ECR of the curb return, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE CONCRETE SIDEWALK**, shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, removals, haul away and disposal to complete the removal as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE AC DIKE** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting and disposal to complete the removal, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE CMP (18", 30" AND 60")** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, backfill, compaction and restoration of disturbed areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE EXISTING CATCH BASIN (W=3', W=7' AND W=21')** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, removal of existing local depression, backfill, compaction and restoration of disturbed areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE EXISTING IMPACT BASIN WITH VERTICAL BAFFLE WALL** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, backfill, compaction and restoration of disturbed areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE EXISTING CSP DROP INLET** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, backfill, compaction and restoration of disturbed areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE EXISTING CONCRETE DRAINAGE INLET** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, backfill, compaction and restoration of disturbed areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE 8' X 12' OUTDOOR LOCATION SIGNS INCLUDING POSTS AND FOOTINGS** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, haul away and disposal to complete the removal, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

300-2 UNCLASSIFIED EXCAVATION

300-2.1 General. *ADD the following:*

Unclassified excavation shall include excavation required beyond the limits of roadway excavation as described in Section 300-1.4 of these Special Provisions. This item also includes hauling/disposing of all cut material, including AC and AB beyond the limits of roadway excavation as described in Section 300-1.4 of these Special Provisions, all rough and fine grading operations (excluding the southeast corner of the intersection of University Drive and California Avenue as shown on the Plans), over-excavation for fill areas and areas to be paved, cutting of benches for fill to be placed on existing slopes and haul away / proper disposal of all excess excavation. The opinion of probable total in-place volume of existing unclassified excavation material is approximately 13,000 Cubic Yards. The approximate quantities have been provided for the Contractor's convenience only and no guarantee is made that they are exact. All excavation and grading shall be done in accordance with the contours, grades and typical sections as shown on the Plans and as required to achieve the proper pavement and surface improvement sub-grade elevations called for on the Plans.

300-2.9 Payment. *Delete the first paragraph and REPLACE with the following:*

Measurement and Payment for **UNCLASSIFIED EXCAVATION** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavating, over excavation, sloping, rounding of tops, toes, and ends of excavations, excavation and removal of median and earth below median to construct temporary 4-inch thick asphalt pavement as indicated on the project stage construction plans, placement, compaction, stockpiling, loading, hauling to final location and properly disposing of surplus material at a legal disposal site, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **FINE GRADING (SLOPE GRADING - NON RETAINING WALL)** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, grading the existing slope at 2:1 maximum per Section A-A on Sheet RW-2 of the Plans (fill areas to be benched in compliance with OCPW Standard Plan 1322), as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

300-4 UNCLASSIFIED FILL

300-4.1 General. *MODIFY to ADD the following:*

Unclassified fill shall be used for fill slopes per the details shown on the Plans and to bring the roadway structural section and surrounding grades to the elevations shown on the Plans. Unclassified fill shall also conform to the requirements established in geotechnical investigation report prepared by LOR Geotechnical (Subsurface Soils Investigation and Pavement Evaluation – University Drive Widening Improvement Project, City of Irvine, LOR Project No. 63199.9, dated March 17, 2016), which is available for review at the City Public Works Department. Fill should consist of approved earth materials free of trash debris, roots, vegetation, or other deleterious material.

The Contractor is required to take the necessary precautions to protect the existing vegetation along the perimeters outside the proposed grading daylight limits as shown on the Plans. Prior to beginning the grading operations the Contractor and City's construction representative shall walk the site and clearly establish the project grading limits, intents and the Contractor's proposed means and methods.

Unclassified fill shall be inorganic, non-expansive granular soils free from rocks or lumps greater than 6 inches in maximum dimension. Sources for import fill shall be approved by the City's geotechnical engineer prior to their use.

The opinion of probable total in-place volume of unclassified fill material is approximately 1,500 Cubic Yards. The approximate quantities have been provided for the Contractor's convenience only and no guarantee is made that they are exact.

300-4.2 Preparation of Placement Areas.
DELETE the last part of the 2nd sentence and SUBSTITUTE with the following:
. . . to a relative compaction of at least 90 percent for a depth of one foot (1').

300-4.5 Placement.
1st paragraph, DELETE the last sentence and SUBSTITUTE with the following:

Prior to placement of fill, the surfaces of all areas to receive fill shall be scarified to a depth of 12 inches minimum. The scarified soil should be brought to near optimum moisture content and recompacted to a relative compaction of at least 90% (ASTM D 1557).

Fill shall be spread in a maximum 8-inch uniform, loose lifts, each lift brought to near

optimum moisture content, and compacted to a relative compaction of at least 90% (in accordance with ASTM D 1557).

300-4.10 Payment. *Delete the first sentence of the first paragraph and REPLACE with the following:*

Measurement and Payment for **UNCLASSIFIED FILL** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured, calculated using the average end area method, and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to the filling operations as required for rounding of tops, toes, and ends of fill areas, placement and compaction of backfill for keying and filling in slopes, stockpiling, loading, and hauling to final location and disposing of surplus material at a legal disposal site, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

300-4.1 General. *MODIFY to ADD the following:*
Fill should consist of approved earth materials free of trash debris, roots, vegetation, or other deleterious material.

300-4.2 Preparation of Placement Areas.
DELETE the last part of the 2nd sentence and SUBSTITUTE with the following:
. . . to a relative compaction of at least 90 percent.

SECTION 301 – SUBGRADE PREPARATION, TREATED MATERIALS AND PLACEMENT OF BASE MATERIALS

301-1 SUBGRADE PREPARATION

301-1.2 Preparation of Subgrade. *After the last paragraph, ADD the following text:*

The Contractor shall scarify, grade and re-compact the top 6-inches of base material if exposed.

301-1.6 Adjustment of Manhole Frame and Cover Sets to Grade. *After the last paragraph, ADD the following text:*

Removal and replacement of water valve frame and covers, adjustment of storm drain manhole frames and covers, and adjustment of sewer manhole frames and covers to grade shall conform to the provisions of Section 301-1.6 and 302-5.8 of the Standard Specifications and the following additions and revisions:

Removal and replacement of Irvine Ranch Water District (IRWD) water valves to grade shall conform to IRWD Standard Plan W-22, adjusting IRWD sewer manhole frames and covers to grade shall conform to IRWD Standard Plan S-1. IRWD will supply new valve cans and lids. Contractor shall coat top surface of lids according to IRWD System C-2. Contractor shall coat the top surface of manhole lids and frames with one coat, color black, 0.5 mils dry-film thickness of Carboline 890 VOC (or approved equal). Prior to coating, surface shall be cleaned by wire brushing to remove asphalt and debris)

All surface utility covers (even those to be adjusted to grade by others) shall be located in the field prior to beginning any work on this project. The Contractor shall remove existing concrete pads or collars that might interfere with the adjustment of the valve cover to the grade of the asphalt concrete surface. Any damage to existing utility systems or appurtenances by the Contractor shall be replaced at the Contractor's expense.

All water related work shall be done in conformance with the City of Irvine requirements and IRWD Specifications for Construction of Water Facilities. IRWD Standard notes have been included in Appendix D for reference. Water valves shall be accessible at all times. The Contractor shall notify the IRWD inspector at (949) 453-5300 forty-eight (48) hours in advance for inspection of this work.

The following method shall be utilized to adjust manhole frames and covers, water valve covers, and survey well monument covers.

a) After the asphalt concrete pavement overlay has been completed, circular holes shall be cut where the cover exists. The diameter of the circular hole shall be at least twenty-four inches (24") larger than the outer diameter of the cover.

b) The cover shall then be raised to the finished pavement grade and suitably blocked and concreted in place to the satisfaction of the Owner's Representative.

c) A PCC collar shall be poured around the cover to an elevation no more than two inches (2") below finished pavement grade. Said PCC collar shall have a minimum depth of eight inches (8") or (as shown per plan) and be placed over four inches (4") of crushed aggregate base (CAB), thoroughly compacted to 95% minimum relative compaction.

d) After the concrete has cured sufficiently, a tack coat shall be applied and ARHM-GG-C surface course material shall be placed to finished pavement grade.

The Contractor shall also be responsible for coordinating his work with the various utility owners who will be required to adjust their own surface utility covers to grade as noted on the Plans. This includes tying out their covers and notifying all surface utility owners prior to performing any work that will affect their facilities. If the required adjustment of the owner adjusted utility covers will impact the Contractor's subsequent work then the Contractor shall coordinate his work schedule and/or perform follow up work to ensure that the quality of the final product is not compromised.

301-2 UNTREATED BASE

301-2.4 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **CLASS 2 AGGREGATE BASE** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to subgrade preparation, as shown on the Plans, as

specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for placement of crushed aggregate base materials for PCC related improvements shall be considered included in the cost of the applicable PCC improvement.

SECTION 302 – ROADWAY SURFACING

302-1 COLD MILLING OF EXISTING PAVEMENT.

302-1.1 General. *After the last paragraph, ADD the following text:*

Cold milling shall conform to the details shown on the Plans and these Special Provisions. All temporary striping required after cold milling operations shall be installed per City Standards. All required temporary striping shall be considered paid for under the bid item for Traffic Control. No additional compensation will be allowed.

Cold milling shall not be performed more than two (2) days ahead of surface course paving.

Cold milling operations adjacent to new curb or curb and gutter shall be conducted after the construction of the median curb unless approved otherwise by the City Engineer.

Residue from grinding shall not be permitted to flow or travel into gutters, onto adjacent street surfaces or parkways. All residues shall be completely removed by a vacuum sweeper and properly disposed. Sweeping is to take place immediately after the grinding has been completed and as directed by the Engineer. No washing of any residue into gutters and/or drainage structures shall be allowed. The Contractor shall cover and protect all storm drain inlets prior to the start of cold milling operations.

All pavement transitions and temporary striping/markings shall be in place prior to the opening of a lane for traffic. Any pavement grade differential between adjacent lanes that will, with the permission of the Engineer, remain during non-working hours shall be indicated with the appropriate warning signage.

Cold mix 6:1 AC tapers shall be placed and maintained at the interface between milled and non-milled areas as well as at manholes, valves, and bus pads to eliminate the hazard caused by sudden elevation differences, especially in pedestrian path of travel areas adjacent to wheelchair ramps, and shall be removed prior to placement of surface course pavement.

The Contractor shall provide access and detour signing at all times for pedestrian facilities and bike lanes when cold milling.

The Contractor is to notify the Engineer at least two (2) working days prior to and immediately after the cold mill operations so that observations and measurements may be made of areas before the placement of permanent asphalt.

302-1.12 Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **COLD MILL AC PAVEMENT** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to cold milling, removal and disposing of all milled material, installation of temporary AC ramps, removal and disposal of temporary AC ramps and sweeping, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Any temporary AC required due to cold milling operations, excluding the bid item for 4-inch temporary AC paved median as indicated on the project stage construction plans, shall be included in the contract lump sum price bid for Traffic Control and no additional compensation will be allowed therefor.

302-4 SLURRY SEAL SURFACING.

302-4.1 General. *ADD the following:*

The Contractor shall immediately inform the City of any necessary asphalt patching or repairs, and all other roadway surface preparation work not included in these specifications, but is required in order to achieve the required quality of slurry seal work.

Prior to the Slurry application, the Contractor shall perform the following preparation Work, unless otherwise specified:

1) Remove all existing pavement striping, markings, and legends, and raised pavement markers per Section 314 of the Standard Specifications and these Special Provisions.
2) Apply crack sealant in accordance with Section 302-14 of the Standard Specifications and these Special Provisions.
3) Protect all manhole covers , drain inlet covers, monument covers and all other utility covers from slurry seal operations by applying a sheet of plastic , cut to fit or placing a plastic bag over the exposed facilities or other methods approved by the Engineer. All traces of plastic , residual emulsion and slurry shall be removed from all manhole covers, drain inlet covers, monument covers and all other utility covers as quickly as possible, after the application of slurry seal and/or prior to final acceptance of the project.
4) Clean all surfaces that are to be slurried, including removing all debris, vegetation, and other organic matter, removing any standing water, and sweeping the project area to remove all loose rocks and material.

302-4.10 Measurement. *DELETE this subsection in its entirety and REPLACE with the following:*

Slurry seal shall be measured by the Square Foot (SF) for the actual pavement area slurry sealed. Quantities shown in the Bidder's Proposal are based on estimated measurements of the project area and are approximations only.

302-4.11 Payment. *DELETE this subsection in its entirety and REPLACE with the following:*

Payment for **TYPE II SLURRY SEAL** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, testing for and furnishing the mix design, trial batches and test strips, surface preparations, rolling, street sweeping, furnishing added water and set-control additives, latex, mixing water with asphaltic emulsion for coating the pavement, application of herbicide, crack sealing, water, and protecting the seal until it has set all protection of manholes , valve boxes, drain inlets and other service entrances, and site cleanup, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

302-5 ASPHALT CONCRETE PAVEMENT.

302-5.1 General. *After the last paragraph, ADD the following text:*

All soils and materials are subject to testing by AGENCY.

The asphalt concrete design mix shall be submitted for approval by the City a minimum of two weeks prior to the start of AC construction.

302-5.5 Distribution and Spreading. *After the last paragraph, ADD the following text:*

The Contractor shall be responsible for maintaining location of and access to all water line gate valves during construction operations. Locations of water valves shall be marked to IRWD standards.

Soil Sterilant shall be "Poly-Bor Chlorate" or Monbar Chlorate" (U.S. Borax and Chemical Corporation, or approved equal), applied in solution of one (1) pound of chemical to one (1) gallon of water at least 10 days prior to placing of the Rubberized Asphalt Overlay. The sterilant shall be applied to cracks larger than one-fourth (1/4) inch with a paddle agitator spray rig. The Contractor shall provide all necessary protection to prevent injury to animals or adjacent plant life and property occasioned by the application of the soil sterilant. The Contractor will be held responsible for all personal injury or property damage caused by the application or storage of soil sterilant.

The crack sealant shall be a type “D” joint sealant per Section 201-3.7 of the Standard Specifications and shall be ROADSAVER II by Crafco or approved equal. The contractor shall submit for approval the material he intends to use for crack sealant two (2) weeks prior to its incorporation into the work. Crack sealant shall be applied per manufacturer and industry recommendation.

302-5.6 Rolling

302.5.6.1 General. *After the last paragraph, ADD the following text:*

Initial or breakdown compaction shall consist of a minimum of three coverages of a

layer of asphalt mixture. A pass shall be a movement of a roller in both directions over the same path. A coverage shall be as many passes as are necessary to cover the entire width being paved. Overlap between passes during any coverage made to insure compaction without displacement of material in accordance with good rolling practice shall be considered a part of the coverage being made and not a part of a subsequent coverage. Each coverage shall be completed before subsequent coverages are started. Pneumatic rollers shall not be used without prior approval of the Engineer. The top layer of each lane, once commenced, shall be placed without interruption.

302-5.9 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **0.40' AC BASE COURSE, AC LEVELING COURSE, AND 0.33' AC SURFACE COURSE (TEMP. MEDIAN PAVEMENT FOR STAGE CONSTRUCTION AND TRAIL)** shall be made at the contract unit price bid per **Ton (TON),** based on delivered weight and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to removals, disposal, certified weigh tickets, subgrade and surface preparation, weed kill, placing tack coat and sealing existing cracks, placing, rolling, testing and protecting asphalt concrete, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

The Contractor shall furnish to the Owner's Representative a legible copy of a licensed weighmaster's certificate showing net weight of asphalt concrete in each truck load. The labeled certificate must be delivered to the Owner's Representative on site on the same day that the asphalt concrete is delivered. If any of these conditions are not met, the City will not allow payment for the certificates. The compaction after rolling shall have a relative compaction of 95%.

The City will not compensate the Contractor for any additional costs incurred by change or lack of availability of asphalt binders.

Temporary asphalt concrete work, where required by the Engineer for traffic control or other purposes excluding the bid item for 4-inch temporary AC paved median as indicated on the project stage construction plans, shall be considered included in the lump sum price bid for Traffic Control and no additional compensation will be allowed therefor.

302-9 ASPHALT RUBBER HOT MIX (ARHM).

302-9.1 General. *MODIFY to ADD the following:*

All ARHM shall comply with section 203-11 of the Standard Specifications. The Contractor shall submit a copy of the asphalt concrete mix design, a sample of the asphalt concrete, a sample of the aggregate, and a sample of the paving asphalt to the City or its designated laboratory a minimum of two weeks prior to the start of construction.

The 2" Minimum Thickness ARHM Overlay shall be ARHM-GG-C.

The Contractor shall use a PG Asphalt Binder.

PG Asphalt binder shall conform to the following requirements:

Description
Asphalt shall consist of refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt, prepared from crude petroleum. Asphalt shall be free from residues caused by the artificial distillation of coal, coal tar, or paraffin, free from water and homogeneous.

Materials
The Contractor shall furnish asphalt in conformance with the State of California Department of Transportation (Caltrans) "Certification Program for Suppliers of Asphalt." Caltrans maintains the program requirements, procedures, and a list of approved suppliers at: http://www.dot.ca.gov/hq/esc/Translab/fpmcoc.htm.

The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

Sampling
The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 600 and 750 mm above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

The sampling device shall include a valve:

a) With a diameter between 10 and 20 mm
b) Manufactured in a manner that a one-liter sample may be taken slowly at any time during plant operations
c) Maintained in good condition

The Contractor shall replace failed valves. In the presence of the Engineer, the Contractor shall take 2 one-liter samples per operating day. The Contractor shall provide round friction top containers with one-liter capacity for storing samples.

302-9.3 Distribution and Spreading. *MODIFY to ADD the following:*

The Contractor shall make modifications to the proposed mix design as required by the City or its designated laboratory to insure that the proposed asphalt concrete mix will meet the minimum stability ("S") values. No asphalt concrete shall be placed until such time as the City has tested and approved the Contractor's proposed asphalt concrete mix design. Aggregate produced from slag resulting from any steel-making process or from air-cooled iron blast furnace slag shall not be used on this project.

Asphalt concrete shall be placed with a paving machine equipped with a "Preco" attachment or similar device for use in obtaining constant cross- slope and maximum joint quality.

Apply SS-1H tack coat at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joins of AC patching and P.C.C. surfaces and edges against which ARHM is to be placed. Diesel fuel shall not be used for cleaning purposes within the limits of this project.

All surfaces to be overlaid shall be cleaned by the use of a broom and a vacuum sweeper. The overlaid surface shall be free of water, dust, or foreign material before tack coat is applied. All raised pavement markers shall be removed prior to the placement of any asphalt concrete overlay. Removal of all AC slurry seal residue from gutter edge should be completed prior to paving.

The Contractor shall utilize a paving machine equipped with an automatic adjusting screed, which is actuated by a 30-foot "ski", for the entire ARHM overlay.

Breakdown compaction shall be performed with a two-axle or three-axle tandem or three-wheel roller weighing not less than 12 tons for all ARHM lift thickness of four (4) inches or less. Breakdown compaction shall be performed with a vibratory roller weighing not less than 12 tons for all ARHM lift thickness between two (2) and four (4) inches. When more than one layer of ARHM is required, the layers shall be of equal thickness.

302-9.4 Rolling. *MODIFY to ADD the following:*

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint. Join lines between successive runs shall be within six (6) inches of lane lines or a minimum of twelve (12) feet outside of the outer most lane line.

Lots consisting of 500 tons will be established for ARHM areas to be tested. The City or its designated laboratory shall perform density testing utilizing a properly calibrated nuclear asphalt-testing device. The City shall pay for all initial testing and a reasonable amount of retesting utilizing the nuclear asphalt-testing device. If the test results for any lot of ARHM indicate that the relative compaction is below 95 percent the Contractor will be advised that he is not attaining the required relative compaction and that his materials or his procedures, or both, need adjustment. ARHM spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the required compaction. Core testing of areas not meeting the 95 percent requirement will be conducted by the City's designated lab. Any and all testing beyond the initial core testing will be at the sole expense of the Contractor.

If the test results for any lot of ARHM continue to indicate that the relative compaction is less than 95 percent after adjustments have been made, the ARHM represented by that lot may be required to be removed and replaced at the Contractor's expense and the Contractor shall suspend all further paving operations until the Contractor can demonstrate to the City that relative compactions of 95 percent can be obtained. It shall be the sole judgment of the City Engineer to determine adequate remedy and/or a reduction in compensation for any lot failing to meet 95 percent relative compaction.

The City's designated laboratory will obtain samples of the ARHM from each lot to perform extraction tests to insure the proper aggregate gradation and asphalt content is being supplied in accordance with the approved ARHM mix design. If the test results for

any lot of ARHM indicate that the ARHM does not meet the requirements of the approved mix design the Contractor will be advised that he is not attaining the required composition and grading and that his materials need adjustment. ARHM spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the approved mix design. If the test results for any lot of ARHM continue to indicate that the composition and grading does not conform to the approved mix design after adjustments have been made, the ARHM represented by that lot shall be removed and replaced at the Contractor's expense and the Contractor shall suspend all further paving operations until the Contractor can demonstrate to the City that the ARHM is in accordance with the approved mix design.

The Contractor shall provide for adequate quality control measures to insure that delivery of asphalt rubber shall be neither too slow nor too fast to prevent stopping of the paving operation and/or cooling of the asphalt rubber material. Material delivery scheduling and handling is critical to provide for optimum compaction opportunity and maximize ride quality performance.

302-9.7 Rock Dust Blotter. *MODIFY to ADD the following:*

Rock dust blotter material shall be required immediately after the completion of the "finish rolling" and prior to opening to traffic to prevent bleeding and tracking of the asphalt rubber material.

All excess rock dust blotter shall be removed from the street at the end of each workday. The removal of the rock dust blotter shall include removal from adjacent streets as needed. No excess rock dust blotter shall be left on any street after normal work hours. The cost of this application will be included into the contract unit price bid for ARHM.

302-9.8 Measurement. *DELETE in its entirety and SUBSTITUTE with the following:*

Measurement for **ASPHALT RUBBER HOT MIX (ARHM)** will be by the actual tonnage (ton) of material placed in accordance with the Plans and no additional compensation will be allowed therefor. The Contractor shall furnish to the Engineer at the time of delivery of the material on the job site a legible copy of a licensed weighmaster's certificate showing gross, tare, and net weights of each truckload of asphalt concrete mixture. Material that is delivered but not placed within the allotted bid item will not be measured or paid for.

302-9.9 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*

Payment for **0.20' ASPHALT RUBBER HOT MIX (ARHM) SURFACE COURSE** shall be at the contract unit price bid per **Ton (TON)** based on delivered weight and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to removals, disposal, certified weigh tickets, placing asphalt rubber hot mix (ARHM), cleaning existing surface, weed kill, placing tack coat, sealing existing cracks, furnishing, applying and cleaning up excess rock dust blotter to the lines and grades shown on the Plans and as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

The City will not compensate the Contractor for any additional costs incurred by change or lack of availability of asphalt binders.

Temporary asphalt concrete work, where required by the Engineer for traffic control or other purposes excluding the bid item for 4-inch temporary AC paved median as indicated on the project stage construction plans, shall be considered included in the contract Lump Sum price bid for Traffic Control and no additional compensation will be allowed therefor.

ADD:

302-9.10 Material Transfer Device (Shuttle Buggy).

302-9.10.1 General. The Shuttle Buggy shall be used for the placement of ARHM. The material transfer device speed shall be adjusted to the speed of the paver to maintain a continuous, non-stop paving operation.

302-9.10.2 Materials and Equipment. The Shuttle Buggy shall have a minimum surge capacity of 15 tons, shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following:

a) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage. Shuttle Buggies having paver style hoppers shall have a horizontal bar restraint placed across the foldable wings which prevents the wings from being folded.

b) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 14 tons.

c) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger or two full-length longitudinal paddle mixers designed for the purpose of re-mixing the ARHM. The longitudinal paddle mixers shall be located in the paver hopper insert.

302-9.10.3 Structures. The Shuttle Buggy may be allowed to travel over structures under the following conditions:

a) Approval will be given by the Engineer.

b) The vehicle shall be emptied of ARHM material prior to crossing the structure and shall travel at crawl speed across the structure.

The tires of the vehicle shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-1 CONCRETE STRUCTURES

303-1.1 General. *ADD after the last paragraph the following text:*

The installation of the Bioretention system shall be performed by a manufacturer-approved installation Contractor. The installation Contractor shall be licensed and insured in accordance with City requirements and listed as a sub-Contractor in the appropriate section of the project Contract Documents.

It is the City's intent that the specified Bioretention system device will be completely compatible with the various storm drain inlets and that they will function exactly as specified herein and per the manufacturer's intent. However, it shall be the Contractor's ultimate responsibility to confirm the exact compatibility and intents detailed herein and on the Plans are met at the time of order of the Bioretention system from the manufacturer. If the Contractor or installation sub-contractor notes any discrepancy between these specifications and the manufacturer's, the Contractor shall notify the City immediately so that said discrepancy can be resolved without delay or extra compensation due to the Contractor.

The installation contractor shall supply the City with an installation record, denoting the date of installation, drainage inlet location, type of drainage inlet and type and size Bioretention system device, for the City's use in developing a future maintenance schedule.

a. Each unit shall be constructed at the locations according to the sizes shown on the approved drawings. Any modifications to the elevation or location shall be at the direction of and approved by the Engineer.
b. If the Bioretention system device is stored before installation, the top slab must be placed on the box using the 2x4 wood provided, to prevent any contamination from the site. All internal fittings supplied (if any), must be left in place as per the delivery.
c. The unit shall be placed on a compacted sub-grade with a minimum 6-inch gravel base matching the final grade of the curb line in the area of the unit. The unit is to be placed such that the unit and top slab match the grade of the curb in the area of the unit. Compact undisturbed sub-grade materials to 95% of maximum density at +1- 2% of optimum moisture. Unsuitable material below sub-grade shall be replaced to the site engineer's approval.
d. Outlet connections shall be aligned and sealed to meet the approved drawings with modifications necessary to meet site conditions and local regulations.
e. Once the unit is set, the internal wooden forms and protective mesh cover must be left intact. Remove only the temporary wooden shipping blocks between the box and top slab. The top lid should be sealed onto the box section before backfilling, using a nonshrink grout, butyl rubber or similar waterproof seal. The boards on top of the lid and boards sealed in the unit's throat must **NOT** be removed. The Supplier (Americast or its authorized dealer) will remove these sections at the time of activation. Activation is to be performed by supplier or its authorized dealer. Backfilling should be performed in a careful manner, bringing the appropriate fill material up in 6" lifts on all sides. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of the Bioretention system unit shall conform to ASTM specification C891 "Standard Practice for Installation of Underground

Precast Utility Structures", unless directed otherwise in contract documents.

303-1.11 Payment. *ADD the following:*

Measurement and Payment for **CONSTRUCT CATCH BASIN TYPE I (W=3.5'), INCLUDING LOCAL DEPRESSION,** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, root pruning, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, reinforcing steel placement, concrete placement, covers, rims, grates, frames, collars, cone, bases, steps, clean up; installation of "No Dumping – Drains to Ocean" stenciling, backfill, compaction, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement, removal and disposal of excess spoils and materials, as shown on the Plans, and detailed by City of Irvine Standard Plans 300 and 303, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT MODIFIED CATCH BASIN TYPE I,** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, root pruning, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, reinforcing steel placement, concrete placement, covers, rims, grates, frames, collars, cone, bases, steps, clean up; installation of "No Dumping – Drains to Ocean" stenciling, backfill, compaction, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement, removal and disposal of excess spoils and materials, as shown on the Plans, and detailed by City of Irvine Standard Plan 300 and Detail 84 on Sheet RW-2 (i.e. Sheet 43 of 87) of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CATCH BASIN TYPE II (W=7' and 21'), INCLUDING LOCAL DEPRESSION**, shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, root pruning, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, reinforcing steel placement, concrete placement, covers, rims, grates, frames, collars, cone, bases, steps, clean up; installation of "No Dumping – Drains to Ocean" stenciling, backfill, compaction, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement, removal and disposal of excess spoils and materials, as shown on the Plans, and detailed by City of Irvine Standard Plans 301 and

303, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL FILTERRA UNIT (12'Lx4'W, 6'Lx4'W, 6'Lx3'W, 4'Lx4'W AND 16'Lx3'W), INCLUDING LOCAL DEPRESSION,** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, removal of existing curb and gutter, excavation, root pruning, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), filterra unit installation, media and tree installation, covers, rims, grates, frames, collars, cone, bases, steps, clean up; installation of "No Dumping – Drains to Ocean" stenciling, doweling, backfill, compaction, forming, sidewalk installation, installation of local depression and all related appurtenances, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement removal and disposal of excess spoils and materials, as shown on the Plans, in accordance with the manufacturer's specifications and per the details shown on the Plans, and local depression as detailed by City of Irvine Standard Plan 303 modified with 3' warped gutter surface, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **RECONSTRUCT EXISTING LOCAL DEPRESSION** shall be made at the contract unit price bid per **Each (EA)** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, saw cutting, breaking, excavation, shoring, stormwater diversion, pumping, removals, storage, haul away and disposal of existing spoils, backfill, compaction and restoration of disturbed areas, as shown on the Plans, and detailed by City of Irvine Standard Plan 303, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING** shall be made at the contract unit price per **Cubic Yard (CY),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, installation of steel reinforcement, concrete installation, as shown on the Plans, as detailed by Section A-A on Sheet C-2 (i.e. sheet 13 of 87) of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS.

303-5.1 Requirements

303-5.1.1 General. *ADD the following subsections:*

303-5.1.1.1 Curbs

Curb and gutter and median curb shall be per City of Irvine Standard Plan No. 200, Type as indicated on the Plans.

Concrete curb and gutter, and median curb shall be constructed to the line and grades shown on the Plans or as ordered by the Engineer. Existing curb and gutter to be joined shall be saw cut on a neat, straight line at the join location. Curb or curb and gutter construction shall occur prior to all cold milling and paving operations.

At specified locations for curb construction indicated on the Plans, construction shall include the saw cutting and full AC reconstruction of a 1' wide portion of AC pavement next to the curb or curb and gutter.

303-5.1.1.2 Sidewalk

Concrete sidewalk shall be constructed to the line, grades and designs shown on the Plans or as ordered by the Engineer. Existing surfaces to be joined shall be sawcut on a neat, straight line at the join location. The contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

This work item shall also include all necessary natural ground and miscellaneous excavation, removal and export as may be required to install the new 4" PCC Sidewalk and necessary irrigation system modifications, protection and adjustments that may be required. The Contractor shall also be required to conduct all necessary grading at the new back of walk in order to ensure that full ADA compliance is achieved within the new sidewalk areas.

303-5.1.1.3 Curb Ramp

Curb ramp shall be completed in accordance with City of Irvine Standard Plan 202, per the Plans, and these Special Provisions.

The Contractor shall be responsible to layout the proposed ramps to comply with the maximum grades shown on City of Irvine Standard Plan 202 and pertinent details on the Plans. **Limits of the new curb ramp shall be reviewed and approved by the Engineer prior to saw cutting.** Typical construction tolerances to construct the new curb ramp shall not apply and maximum grades indicated on the Plans shall not be exceeded. If a newly constructed ramp is deemed non-compliant with the standards and requirements shown on City of Irvine Standard Plan 202, the pertinent details on the Plans and these Special Provisions, the Contractor shall be responsible to remove the curb ramp and reconstruct a new curb ramp at his own cost.

All new curb ramps shall have a zero-inch (0") lip of gutter at the curb ramp opening, and a cast-in-place detectable warning surface per these Special Provisions.

Where the type of curb ramp includes a retaining curb to make up for a difference in elevation between the existing grade and curb ramp grade, the construction of said retaining curb shall be considered as part of the curb ramp work.

The Contractor shall verify, with a "smart level", that maximum ramp and sidewalk grades do not exceed the maximum grades indicated in the City of Irvine Standard Plan

202 and pertinent details on the Plans when marking the required saw cut removal limits and when setting the concrete forms, prior to pouring any curb ramp locations. It shall be the Contractor's responsibility to supervise and utilize the proper experienced personnel to ensure that the proper saw cut limits are established for all curb ramp locations and the City shall not be responsible to direct the Contractor's crews or otherwise serve in this management capacity. The Engineer shall be present to verify the concrete forms, prior to the Contractor pouring any PCC construction improvements.

Sub-grade materials shall be compacted to a minimum relative compaction of 95 percent. Adjacent AC removal and replacement shall conform to the requirements established in these Specifications and shall be considered included in the unit price for the PCC curb ramp construction.

Special Note To Contractor:

Prior to constructing a curb ramp where physical site constraints do not allow the curb ramp construction to fully meet the City of Irvine Standard Plan 202 and the pertinent details on the Plans, the Contractor shall so notify the Engineer for direction.

The curb ramp construction work shall include all related adjustments of pull boxes, pull box covers, and protection of traffic signal poles and signs that fall within the proposed PCC curb ramp construction limits.

303-5.5.5.1 Detectable Warning Surface.

New curb ramp shall include a detectable warning surface as shown on City of Irvine Standard Plan 202. Detectable warning surface shall extend the full width and 3' depth of the ramp. A 4' wide detectable warning surface may be used on a 4'-2" wide curb ramp.

The detectable warning surface required for new curb ramps shall be CAST-IN-PLACE DETECTABLE WARNING SURFACE, MANUFACTURED BY ACCESS TILE (562) 842-9934, www.accesstile.com, (Part #: ACC-R3x4-BK) or approved equal. Shop drawings and color sample for the truncated dome panels shall be provided to the Engineer for approval. Truncated dome panels shall not be installed prior to the Engineer's approval of the shop drawings and color sample.

The orientation of the dome pattern for all panels shall be parallel with the panel edges.

The color of the truncated dome panels shall be Onyx Black conforming to Federal Color No. 17038. Any color deemed unacceptable by the Engineer, including gray and dark gray, shall be rejected.

Detectable warning surface shall be installed per the manufacturers' recommendations and instructions. The finished surface shall be free from blemishes.

The Contractor shall submit to the Engineer for review the following items:

A. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.

B. Samples: Submit two tile samples of the kind proposed for use (minimum size 6” by 8”).

C. Materials Test Reports: Submit test reports from qualified independent testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated. All test reports shall be conducted on a cast-in-place tactile tile system as certified by a qualified independent testing laboratory.

D. Maintenance Instructions: Submit copies of manufacturer’s specified maintenance practices for each type of tactile tile and accessory as required.

The manufacturer shall provide a written minimum 5-year warranty for prefabricated detectable warning surfaces, guaranteeing replacement when there is a defect in the dome shape, color fastness, sound on cane acoustic quality, resilience, or deterioration of the detectable warning surface. The warranty period shall commence on the date of acceptance of the project by the Engineer.

303-5.9 Measurement and Payment. *After the last paragraph, ADD the following text:*

In addition, payment for constructing concrete curb and curb and gutter shall include full compensation for all related root pruning adjacent to reconstruction areas, all related forming, sub-grade preparation, all related sprinkler system modifications and adjustment to protect in place or to set aside in order to install the item, shall be included and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE CURB AND GUTTER** shall be made at the contract unit price bid per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to grading, root pruning, installation of moisture barrier, disposal, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, concrete installation, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement as shown on the Plans, and as detailed per the applicable curb and gutter type by City of Irvine Std. Plan No. 200, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE MEDIAN CURB** shall be made at the contract unit price per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to grading, root pruning, installation of moisture barrier, disposal, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, concrete installation, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to

the proposed concrete improvement as shown on the Plans, the details shown on City of Irvine Std. Plan No. 200, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE MOW CURB** shall be made at the contract unit price per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to grading, root pruning, installation of moisture barrier, disposal, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, concrete installation, concrete protection and replacement of damaged or marked concrete, backfill and restoration of area adjacent to the proposed concrete improvement as shown on the Plans, the details shown on City of Irvine Std. Plan No. 600, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE RETAINING CURB WALL** shall be made at the contract unit price per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to grading, root pruning, installation of moisture barrier, disposal, subgrade preparation, utility modifications and adjustments, sprinkler system modifications and adjustment (temporary and permanent), forming, installation of steel reinforcement, concrete installation, concrete protection and replacement of damaged or marked concrete, backfill and infill of the one (1) foot wide full-depth AC pavement adjacent to the proposed concrete improvement as shown on the Plans, and detailed on Sheet C-1 (i.e. Sheet 12 of 87) “Retaining Curb Detail” of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE DRIVEWAY** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved, complete in place, conforming to the requirements herein, including but not limited to, construction staging to maintain temporary pedestrian and vehicle access, saw cutting, removal and disposal of the existing improvements, grading, excavation and backfill, rooting pruning, disposal, subgrade preparation, forming, adjustment of pull boxes and valve cans, aggregate base, concrete installation, concrete protection and replacement of damaged or marked concrete, joining into adjacent curb and gutter, construction and joining into adjacent sidewalk and removal and replacement of adjacent AC pavement behind the driveway approach, installation of detectable warning surface per City of Irvine Standard Plan 202 and construction of retaining curbs, as detailed on Detail 32A on Sheet C-1 of the Plans, as detailed by City of Irvine Standard Plans 204 and 205, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment **for CONSTRUCT CONCRETE SIDEWALK** shall be made

at the contract unit price per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved, complete in place, conforming to the requirements herein, including but not limited to, maintaining temporary pedestrian access, excavation and backfill, rooting pruning, disposal, subgrade preparation, grading, forming, adjustment of pull boxes and valve cans, concrete installation, concrete protection and replacement of damaged or marked concrete, as shown on the Plans and as detailed by City of Irvine Standard Plan 201, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement for curb ramp construction, as shown on the Plans, shall include the area of the entire curb return from BCR to ECR including sidewalk areas, curb & gutter, detectable warning surface, and adjacent AC/AB pavement, unless otherwise directed by the Engineer.

Measurement and Payment for **CONSTRUCT CONCRETE CURB RAMP** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall include the area of the entire curb return from BCR to ECR, including sidewalk areas, curb & gutter, detectable warning surface, and adjacent AC/AB pavement and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete all work including adjustment of pull box frame and covers to finished grade, installation of curb ramp and detectable warning surface, construction and joining into adjacent curb and gutter, any required retaining curb along the back and sides of the ramp, and replacement of the pavement strip at the edge of gutter for those locations outside the road reconstruction limits, and scoring patterns and grooving, as shown on the Plans, as detailed by City of Irvine Standard Plan 202, as detailed on Detail CR-2 on Sheet C-2 (i.e. Sheet 13 of 87) of the Plans, and as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL DETECTABLE WARNING SURFACE (RETROFIT ONLY)** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to surface preparation, installation of surface applied detectable warning surface, testing, clean-up and all work and all other incidentals necessary work and appurtenances required for a complete and in place and proper operating installation as shown on the Plans, as detailed by City of Irvine Standard Plan 202, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 4” CONCRETE MEDIAN PAVEMENT OVER MINIMUM 4” SAND** shall be made at the contract unit price bid per **Square Foot (SF)** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, sub-grade preparation, rooting pruning, compaction, grading, backfill, placement of minimum 4” thick sand bedding and disposal, adjustment of pull boxes and valve cans, concrete installation, concrete protection and replacement of damaged or marked

concrete, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT PARKWAY DRAIN** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to excavation, backfill, subgrade preparation, concrete placement, steel reinforcement, as detailed by SPPWC Standard Plan 151-2, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT V DITCH TO "U" GUTTER TRANSITION** shall be made at the contract unit price bid per **Each (EA)** and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to subgrade preparation, concrete placement, excavation and backfill, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

303-9 RETAINING WALL *ADD the following subsections:*

303-9.1 General

Retaining Walls shall be of Type as specified on the Plans and in accordance with Section 47 and 51 of the Caltrans Standard Specifications, 2015 edition.

Type 1 (Case 2) retaining wall shall be colored concrete, Method B, Sombrero Buff C-25, as described in Section 303-7 of the standard specifications and these Special Provisions.

Type 1 (Case 2) retaining wall surfaces designated in the Plans or Specifications as “architectural treatment” shall be formed using fractured rib formliners per details shown on the project drawings and fractured design No. 367 as manufactured by Silka Greenstreak, 3400 Tree Court Industrial Boulevard, St. Louis, Missouri 63122, phone 800-325-9504 or 636-225-9400, or approved equal. No substitutions will be allowed without prior written approval from the project engineer.

303-9.2 Measurement and Payment.

Measurement and Payment for **CONSTRUCT CALTRANS TYPE 1 (CASE 2) CONCRETE RETAINING WALL** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, structural excavation, backfill and foundation, integral color and formliners, the details shown on the Plans, and detailed by Caltrans Standard Plans B0-3 and B3-1B, per Typical Section on Sheet X-1 (i.e. Sheet 3 of 87) of the Plans, with fractured rib architectural treatment per Detail 90 on Sheet RW-1 (i.e. Sheet 42 of 87) of

the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL CABLE RAILING** shall be made at the contract unit price bid per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, manufacturing and fabrication of cable railing system, and detailed by Caltrans Standard Plan B11-47, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE RETAINING WALL GUTTER** shall be made at the contract unit price bid per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, backfill, concrete placement, grading, forming and detailed by Caltrans Standard Plan B3-6, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT WALL DRAIN WITH PIPE DOME AND WALL GUTTER OUTLET WITH 4" PVC** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, concrete placement, construction of overflow scupper, excavation, backfill, grading, forming and detailed by Caltrans Standard Plan B3-6, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CALTRANS TYPE 6A (CASE 1) CMU RETAINING WALL (H=3'-4")** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, structural excavation, backfill and foundation, reinforcing steel placement, concrete placement, and detailed by Caltrans Standard Plan B3-7A, modifying finished surface in front of wall and clean newly exposed wall face as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CMU WALL CANTILEVER FOUNDATION (BIKE TRAIL)** shall be made at the contract unit price bid per **Cubic Yard (CY),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, structural excavation, backfill and foundation, reinforcing steel placement, concrete placement, and detailed by Caltrans Standard Plan B3-7A, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer

and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CALTRANS TYPE 5 (CASE 1) CONCRETE RETAINING WALL** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, structural excavation, backfill and foundation, reinforcing steel placement, concrete placement, and detailed by Caltrans Standard Plan B3-4A, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

SECTION 304 – METAL FABRICATION AND CONSTRUCTION

304-2 METAL HAND RAILINGS

304-2.1 General. *DELETE the 1st sentence and REPLACE with the following*

Metal hand railing on top of CMU wall as shown on the Plans shall of Type as specified on the Plans and in accordance with Section 83 of the Caltrans Standard Specifications, 2015 edition.

Pedestrian barricades shall be Type I per Caltrans Standard Plan ES-7Q, and shall be constructed at locations shown on the Plans and in conformance with the details shown on the Plans, the provisions in Section 83-1 of the Caltrans Standard Specifications, 2015 edition, and these Special Provisions. Portland cement concrete shall be minor concrete or may be produced from commercial quality concrete containing not less than 590 pounds of cementitious material per cubic yard. Excavated material from the barricade pose holes shall be disposed of outside the public right of way.

304-2.4 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **CONSTRUCT METAL HAND RAIL ON TOP OF CMU WALL** shall be made at the contract unit price bid per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, installation of concrete footing, standard pipe, rails and posts installation, and detailed by SPPWC Standard Plan 606-4, Type B, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL PEDESTRIAN BARRICADE** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, installation of concrete footing, galvanized standard pipe and post installation, and detailed by Caltrans Standard Plan ES-7Q Type I, as shown on the Plans, as specified in the Standard Specifications and

these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

304-3 CHAIN LINK FENCE

304-3.4 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement and Payment for **CONSTRUCT 5' HIGH METAL CHAIN LINK FENCE** shall be made at the contract unit price bid per **Linear Foot (LF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, installation of concrete footing, tie wire, galvanized cap on post, tension wire, and detailed by SPPWC Standard Plan 600-3, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

ADD the following Subsection:

304-6 METAL BOLLARD

304-6.1 General. Bollard posts shall be steel and shall conform to the details shown on the Plans, and as specified in Section 75-1.02 of the Caltrans Standard Specifications, 2015 edition, and these Special Provisions. Bollard posts shall be 4-inch standard galvanized steel pipe filled with concrete as indicated on the Plans.

304-6.2 Measurement and Payment.

Measurement and Payment for **INSTALL BOLLARD** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, foundation, as shown on the Plans, and detailed by Detail 43 on Sheet C-2 (i.e. Sheet 13 of 87) of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

ADD the following Subsection:

304-7 METAL BEAM GUARD RAILING

304-7.1 General. Metal Beam Guard Railing shall conform to the details shown on the Plans. All work for furnishing and installing metal beam guard railing and wood posts for metal beam guard railing shall comply with City of Irvine Standard Plan 401 and the Caltrans Standard Specifications, Section 83 “Railings and Barriers”, and these Special Provisions.

304-7.2 Measurement and Payment.

Measurement and Payment for **INSTALL METAL BEAM GUARD RAILING (MBGR) ON METAL POSTS** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor,

materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, installation of metal beam guard railing, including foundation, as shown on the Plans, and detailed by City of Irvine Standard Plan 401, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

306-1 GENERAL. *ADD the following*:

The pipe installation requirements provided are as follows: (The geotechnical investigation report for this project was prepared by LOR Geotechnical - Subsurface Soils Investigation and Pavement Evaluation – University Drive Widening Improvement Project, City of Irvine, LOR Project No. 63199.9, dated March 17, 2016 and is available for review at the City Public Works Department):

1) Trench shoring shall conform to Cal-OSHA requirements and the Contractor shall submit a shoring design stamped and signed by a California Registered Civil Engineer, which conforms to the soil parameters as described here-in and to the design parameters as described per Section 306-4 Shoring and Bracing of these Special Provisions.

2) Type C soil is the predominant type of material on the project and all short-term excavations should be designed accordingly. In accordance with Title 8 of the California Code of Regulations, simple slope excavations made in Type C soil material should have maximum allowable slopes of 1.5:1 (horiz:vert). Deviation from the standard short term slopes are permitted using option 4, Design by a California Registered Professional Engineer (Section 1541.1) and as approved by the Engineer or authorized representative.

3) The fine grained on-site soils (sandy silt, silty sand, and lean clay with sand) encountered along the proposed pipeline alignment are not suitable for bedding sand around the pipeline due to their high fine content and low sand equivalent. However, the coarse grained on-site soils (well graded sand) encountered along the pipeline alignment are considered adequate for bedding sand around the pipeline due to their low fine content and high (≥ 30) sand equivalent. Bedding material should consist of sand, gravel, or crushed aggregate less than 1 inch in diameter and having a sand equivalent of not less than 30 or as specified by the pipe manufacturer.

4) All trench backfill shall be placed at optimum moisture content under the observation of the Engineer and/or Geotechnical Engineer, and shall be tested to meet 90% Relative Compaction as a percentage of the maximum dry density by ASTM D1557. The upper 12 inches of subgrade materials that are to be paved should be compacted to at least 95% relative compaction.

5) The existing trench excavation material is generally suitable for reuse as trench backfill above the bedding material. Rock or similar irreducible material with a

maximum dimension greater than 6 inches shall not be buried or placed in fills without prior approval by the City's geotechnical engineer.

6) Import fill shall be inorganic, non-expansive, granular soils free from rocks or lumps greater than 6 inches in maximum dimension. Sources for import fill should be approved by the City's geotechnical engineer prior to their use.

306-3 TRENCH EXCAVATION.

306-3.1 General. *ADD the following*:

All trenches shall be saw cut to the bottom of the existing concrete or asphalt section to minimize damage to adjacent pavement. The bottom of the trench shall be excavated uniformly to the grade of the bottom of the pipe and shall be given a final trim using a string line for establishing grade, such that each pipe section when first laid will be continually in contact with the ground along the extreme bottom of the pipe.

When the actual elevation or position of any existing pipe, conduit, or other underground appurtenances, which is shown on the Plans, cannot be determined without excavation the Contractor shall excavate and expose the existing improvement. Such excavation shall be considered as part of the excavation necessary for the open trench work and no additional compensation will be made therefor. The Engineer shall be given the opportunity to inspect the existing improvement when it is exposed. Any adjustments in line or grade, which may be necessary to accomplish the intent of the Plans, shall be made with the direction and approval of the Engineer. Continuation of pipeline installation or structure construction for the remainder of project shall proceed only after Engineer provides necessary design adjustments.

Contractor shall excavate and expose the existing improvements (potholes) at the locations as marked on the ground and any other locations deemed necessary by the Engineer. Such excavation shall be performed as part of the storm drain construction project. However, utility potholing shall be performed far enough in advance of the storm drain pipe installation operation so as to allow the Engineer at least two (2) working days to redesign the storm drain alignment, if so required, due to an unforeseen utility conflict. Failure to pothole all known existing utility crossings in advance of the open trench pipe and structure installation, to confirm their exact depth and location, shall not relieve the Contractor from the obligation to provide the Engineer adequate time for potential redesign or expose the City to any potential claims for related delays or related reconstruction of affected portions of storm drain improvements in the event that they are required to be constructed in a new alignment or profile. All costs for potholing operations adequately in advance of the open trench storm drain pipe and structure installation shall be included in the prices bid for pipe or related structure construction.

Pothole for utilities as detailed herein or locations selected by the agency shall be considered as part of the excavation necessary for the work, and no additional compensation will be made therefor.

306-3.4 Minimum and Maximum Pipe Zone Trench Width. *Add the following*:

For storm drains, the bottom of the trench shall have a minimum width equal to the outside diameter of the pipe plus 6 inches on each side of the edge of pipe and a

maximum width equal to the outside diameter of the pipe plus 12 inches on each side of the edge of pipe.

306-3.5 Maximum Length of Open Trench. *DELETE the first sentence of the first paragraph of this SUBSECTION in its ENTIRETY and REPLACE with the following*:

Except by permission of the Engineer, the maximum length of open trench where prefabricated pipe is installed shall be the distance necessary to accommodate the amount of pipe installed in a single day. Opening up more trench than pipe can be installed and "buttoned up" in one day will not be allowed.

306-4 SHORING AND BRACING. *ADD the following*:

Shoring placed below grade that is restrained against free movement at the top should be designed to resist a lateral earth pressure between active and at rest conditions. A uniform lateral earth pressure, rectangular distribution of 45H pounds per square foot (psf), where H is the height of the trench in feet.

Additional surcharge loads (i.e. equipment, excavation spoil, etc.) placed within a horizontal distance equal to the height of the excavation should be added to the above recommended pressure at a rate of 0.38 times the surcharge load.

The above recommended pressure is based on the assumption that the shored excavation will be kept dry at least to the bottom of the excavation.

In addition, if the excavation walls are composed of trench backfill materials associated to the existing storm drain pipe, the in-place density and shear strength properties of the backfills should be investigated to verify the suitability of the preceding shoring parameters.

The Contractor is required to obtain a permit, for the excavation of trench that is five feet or more in depth and into which a person is required to descend, from the Division of Industrial Safety and shall provide a copy to the Engineer.

The Contractor shall furnish all labor, equipment, and materials required to design, construct, and remove all sheeting, shoring, and bracing or other equivalent method of support for the walls of open excavations required for the construction of this project.

Excavation for any trench or structure five (5) feet or more in depth shall not begin until the Contractor has received written approval, signifying that the Engineer has received the Contractor's detailed plan for worker protection from the hazards of caving ground. Such plan shall be submitted at least five (5) days before the Contractor intends to begin excavation and shall show the details of the design of shoring, bracing or other provisions to be made for worker protection during such excavation. The plan shall designate the use of shoring, sloping or a protective system at least as effective as that required by the Construction Safety Orders of the Division of Industrial Safety. If said plan varies from the shoring system standards established by the Construction Safety Orders, the plan shall be prepared and signed by an Engineer who is registered as a Civil or Structural Engineer in the State of California.

Prior to the beginning of excavations requiring shoring, the Contractor shall designate in writing to the Engineer, someone whose responsibility is to supervise the project safety measures and someone whose responsibility is to supervise the installation and removal of sheeting, shoring, and bracing.

The excavations and shoring, shall be such as to protect all existing improvements and utilities from any damage and to be fully compatible with all requirements for traffic and access and the safe performance of the work.

Attention is directed to the trench width distances on the Plans. The design of the conduit and the shoring is based on this maximum width. If the trench width exceeds the maximum design width, the pipe bedding, pipe D-Load and the shoring shall be redesigned. The Contractor shall submit the shoring re-design stamped and signed by a California Registered Civil Engineer. The Contractor shall be responsible for any additional costs due to the increased trench width.

In addition to shoring the excavations in accordance with the minimum requirements of the Industrial Safety Orders, it shall be the Contractor's responsibility to provide any and all additional shoring required to support the sides of the excavation against the effects of loads which may exceed those derived by using the criteria set forth in the Industrial Safety Orders. The Contractor shall be solely responsible for any damages which may result from his failure to provide adequate shoring to support the excavation under any or all of the conditions of loading which may exist, or which may arise during the construction of the project.

Trench plating required per the traffic control section of these specifications and as directed by the Engineer shall be capable of supporting H20 loading and have a non-skid surface, due to the potential for wet weather.

306-6 BEDDING.

306-6.1 General. *Add the following*:

The Contractor shall not perform open trench operations until storm drain pipe is present on-site. Trenching while pipe sections are in transit shall not be allowed.

The trench bottom shall be graded to provide a smooth, straight, firm and stable foundation at every point throughout the length of the pipe. At each joint in the pipe, the bedding shall be recessed in such manner as to relieve the bell, or coupling, if any, from all loads and to ensure continuous bearing along the pipe barrel. The recess shall be large enough to allow jointing of the pipe without foreign material entering the pipe.

If any trench, through the neglect of the Contractor, is excavated below the grade required by the Plans, Standard Specifications, and/or these Special Provisions, it shall be refilled to grade with additional acceptable bedding per these special provisions. Additional bedding shall be ¾-inch crushed rock in accordance with Section 200-2 of the Standard Specifications and these Special Provisions. The excess excavation and the additional bedding shall be at no expense to the City.

Add the following Subsection:

306-7.3.4 Pipe Laying.

In the event obstructions are encountered during the progress of the work, which require a deviation from the line and grade shown on the Plans, the Engineer shall have the authority to change the Plans and order the necessary deviation from the line or grade. Contractor shall not make any deviation from the specified line or grade without approval by the Engineer.

All surface or groundwater shall be prevented from entering the pipe and shall be removed from the trench in an approved manner.

306-12 BACKFILL.

306-12.1 General. *Add the following*:

Rocks greater than four (4) inches in any dimension will not be permitted in the backfill.

All trench crossings with major utility lines (more than 12-inch diameter) shall be backfilled with mechanically mixed slurry of one sack of Portland cement and one cubic yard of sand.

Where the proposed storm drain pipe shall have two (2) feet or less of cover from the finished surface a PCC concrete blanket / backfill shall be placed from the spring-line of the pipe to within six (6) inches of the proposed finished surface (final 6-inches shall be paved with 4-inches of asphalt concrete base course and 2-inches of asphalt concrete surface course). The exception would be when a Dirt, Rock or other PCC improvement is called for on the Plans.

306-12.3 Mechanically Compacted Trench Backfill. *Add the following at the end of the third paragraph:*

Material for mechanically compacted backfill shall be placed in lifts, which, prior to compaction, shall not exceed 6 inches in depth.

306-12.3.2 Compaction Requirements. *DELETE the Subsection in its entirety and REPLACE with the following:*

Except as specified otherwise, trench backfill shall be densified to the relative compaction requirements of 90 percent. Compaction to 95 percent is required under future pavement through the upper 12 inches.

306-13.2 Permanent Resurfacing. *Add the following:*

See Section 203-6.1 of these Special Provisions for replacement AC requirements. Contractor shall replace in-kind any and all existing surface improvement, such as decorative PCC, brick, planter curb / walls, plants, irrigation improvements, etc.

306-15 PAYMENT. *ADD the following*:

Measurement and Payment for **CONSTRUCT 18" RCP (2000-D)** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the pipe by open trench, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 30" RCP (2000-D)** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the pipe by open trench, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 60" RCP (2000-D)** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the pipe by open trench, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT DOUBLE 3'Wx1'H RCB** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the double 3’ wide x 1’ high reinforced concrete box by open trench, as shown on the Plans, as specified in the Standard Specifications and these Special

Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT CONCRETE COLLAR (18", 30" AND 60")** shall be made at the contract unit price bid per **Each (EA)**, as field measured shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, bedding, forming, placement of reinforcing steel, concrete placement, testing, backfilling and compacting the trench or cement slurry backfill, removal and proper disposal excess materials, and all other related work and materials required for a complete installation, as shown on the Plans and as detailed by City of Irvine Standard Plan 310, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT BLANKET PROTECTION** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, potholing to identify existing pipe/utility, excavation, grading, compaction, Styrofoam installation, forming, concrete placement, bedding, backfilling and compacting the trench or cement slurry backfill, removal and proper disposal excess materials, and all other related work and materials required for a complete installation, as shown on the Plans and as detailed by SPPWC Standard Plan 225-2, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 2' THICK CONCRETE PLUG** shall be made at the contract unit price bid per **Each (EA)**, as field measured shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, excavation, forming, plugging existing pipe with 2' thick concrete plug, concrete placement, testing, backfilling and compacting the trench or cement slurry backfill, removal and proper disposal excess materials, and all other related work and materials required for a complete installation, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT 4" PVC (SCH 40)** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, concrete coring, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the pipe by open trench, as shown on the Plans, as detailed by City of Irvine Standard Plans 223 and 318, as detailed by Detail 81 on Sheet DD-1 (i.e. Sheet 23) of the Plans, as specified in the Standard Specifications and these Special

Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT RCB TO PIPE TRANSITION STRUCTURE** shall be made at the contract unit price bid per **Linear Foot (LF)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, bedding, placing and joining pipe, backfilling and compacting the trench or cement slurry backfill, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install the reinforced concrete box to pipe transition structure by open trench, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

306-15.2 Shoring and Bracing.

Payment for **OPEN TRENCH SHEETING, SHORING, BRACING AND STEEL PLATING** shall be made at the contract **Lump Sum (LS)** price bid and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to acquiring a permit from the Division of Industrial Safety, shop drawing and submittal preparation and revision, necessary dewatering, protection of adjacent facilities and appurtenances, excavation, storage of shoring components, shoring installation, shoring monitoring and repairs, shoring removal, backfill and compaction, restoration of disturbed areas as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor. No additional payment will be made as a result of revisions required in the trench support details, due to a type of soil encountered which requires a method of trench support different from that approved or due to other unforeseen reasons.

306-15.9 Buried Structures. *DELETE the second and third sentences of the first paragraph in its entirety and REPLACE with the following:*

Measurement and Payment for **CONSTRUCT JUNCTION STRUCTURE NO. I** shall be made at the contract unit price bid per **Each (EA)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, backfilling and compacting the trench, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install Junction Structure No. I by open trench, as shown on the Plans, and detailed by City of Irvine Standard Plan 306, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT MODIFIED JUNCTION STRUCTURE NO. I** shall be made at the contract unit price bid per **Each (EA)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, backfilling and compacting the trench, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install Modified Junction Structure No. I by open trench, as shown on the Plans, and detailed by City of Irvine Standard Plan 306 and Detail 83 on Sheet DD-1 (i.e. Sheet 23 of 87) of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **CONSTRUCT JUNCTION STRUCTURE (PIPE TO RCB) PER SPPWC 333-2** shall be made at the contract unit price bid per **Each (EA)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, backfilling and compacting the trench, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to install Junction Structure - Pipe to RCB by open trench, as shown on the Plans, and detailed by SPPWC Standard Plan 333-2, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **ENLARGE OPENING OF EXISTING STORM DRAIN STRUCTURE** shall be made at the contract unit price bid per **Each (EA)**, to be constructed by open trench operations, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, the excavation of the trench, the preparation of sub-grade, advanced utility potholing, backfilling and compacting the trench, temporary resurfacing, required trench-related cold milling of existing pavement, replacement of all interfering surface improvements, and all other work necessary to modify existing storm drain junction structure to enlarge opening with handheld tools to accommodate proposed RCP outside diameter and to join to existing junction structure as shown on Construction Note 62 on Sheet D-2 (i.e. Sheet 19 of 87) of the Plans, and to modify existing storm drain RCB transition structure to enlarge opening with handheld tools to accommodate proposed RCP outside diameter and to join to existing transition structure as shown on Construction Note 65 on Sheet D-2 (i.e. Sheet 19 of 87) of the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

306-15.9 Temporary Resurfacing. *DELETE this SUBSECTION in its entirety and REPLACE with the following:*

Payment for all temporary AC resurfacing by the Contractor, or ordered to be placed by the Engineer, will be considered to be included within the bid item for which excavation was performed.

ADD the following Subsection:

SECTION 313 – TRAFFIC SIGNING

313-1 GENERAL. The Contractor shall furnish and install signs as noted on the Plans, shall protect-in-place existing signs and posts which are not to be removed and shall replace any of these signs which are damaged during construction.

Posts shall be installed in driven post anchors per the manufacturer's specifications.

New signs shall be installed on 10 foot posts, except a longer post shall be used if necessary to maintain a 7 foot vertical clearance from the bottom of the lowest sign to the top of the surrounding surface in pedestrian areas. Signposts shall be installed a minimum of 6 feet from power poles, fire hydrants, and other obstructions.

If the anchor and sleeve are installed in a median island with decorative paving, a concrete or decorative sidewalk area:

A 4-inch diameter Schedule 40 PVC sleeve shall be installed prior to placement of the new decorative paving.

On existing pavement, install a 4-inch diameter Scheduled 40 PVC sleeve by core drilling the pavement.

The length of the sleeve shall be the same as the thickness of the decorative paving or up to 1 inch greater. The sleeve shall be installed flush with the finish grade of the surrounding decorative paving. Back fill the annular void between the sleeve and signpost anchor with existing base material or sand to within 1" of the finished surface. Fill the final 1" with grout.

All signs to be salvaged, as called for on the Plans, shall be become property of the Contractor.

All posts driven signpost anchors shall be completely removed and the signpost anchor assembly hole backfilled with clean fill dirt to match the existing surrounding grade (non-paved areas only). Driven signpost anchors in sidewalk or pavement areas shall be completely removed and backfilled with grout to the level of the surrounding grade. Signposts with foundations in parkway area shall be completely removed and backfilled with clean fill dirt to match the grade of the surrounding area. Signposts located within sidewalk or other paved areas, shall core drill the sidewalk and remove the signpost to below sidewalk or paving then backfilled with concrete or paving material to match the existing.

313-2 MEASUREMENT AND PAYMENT.

Measurement and Payment for **INSTALL SIGN** shall be made at the contract unit price bid per **Each (EA)**, installed and in use, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to sign fabrication, sign post painting, sign post alterations, sign assembly, excavation, sign installation, backfill, protection, covering until relevant and uncovering when necessary as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **RELOCATE SIGN (1 POST)** shall be made at the contract unit price bid per **Each (EA)**, installed and in use, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to sign removal, backfill and grading of existing location, storage, alterations, cleaning, disassembly and assembly, excavation, sign installation, backfill, protection, covering until relevant and uncovering when necessary as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **RELOCATE SIGN (COI)** shall be made at the contract unit price bid per **Each (EA)**, installed and in use, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to sign removal, backfill and grading and restoration of existing location, storage, alterations, cleaning, disassembly and assembly, excavation, sign installation, backfill, protection, covering until relevant and uncovering when necessary as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **RELOCATE UTILITY MARKER** shall be made at the contract unit price bid per **Each (EA)**, installed and in use, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to utility company contact, coordination and inspection services, marker removal, backfill and grading of existing location, storage, alterations, cleaning, disassembly and assembly, excavation, marker installation, backfill, protection, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE SIGN** shall be made at the contract unit price bid per **Each (EA)**, installed and in use, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to sign removal, backfill and grading and restoration of existing location, storage, disposal of delivery to salvage location, as shown on the

Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

SECTION 314 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

REVISE as follows:

314-2 REMOVAL OF TRAFFIC STRIPING AND CURB AND PAVEMENT MARKINGS.

314-2.1 General. *MODIFY to ADD the following:*
All conflicting striping, pavement markings, and curb paint shall be removed by wet sandblasting or other approved method prior to installation of new striping. All conflicting raised pavement markers shall be removed.

Pavement that is damaged due to removal of markers or striping shall be repaired to the satisfaction of the Agency Representative.

Removal of existing yellow painted striping throughout the project limits of University Drive shall comply with the requirements Caltrans Standard Special Provisions 14-11.07 and 15-2.02C(2), included as Appendix C herein these project specifications.

314-2.2.2.3 Measurement and Payment

Measurement and Payment for **REMOVE EXISTING DOUBLE YELLOW PAINTED STRIPE** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, removal of yellow painted striping in compliance with the Caltrans Standard Special Provisions 14-11.07 for removal of yellow traffic stripe (provided in Appendix C of these project specifications), analytical testing, proper storage and disposal of hazardous waste, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for removal of existing striping, excluding double yellow painted striping, shall be considered included in the cost for Traffic Control and no additional payment will allowed therefor.

314-3.2 Measurement and 314-3.3 Payment. *DELETE these SUBSECTIONS in its entirety.*

314-4 APPLICATION OF TRAFFIC STRIPING AND CURB AND PAVEMENT MARKINGS.

314-4.1 General. *MODIFY to ADD the following:*
The Contractor shall furnish and apply traffic stripes and pavement markings as shown on the Plans and as directed by the Agency's Representative. Placement of striping and markings shall conform to the requirements of Section 84 of the State Standard

Specifications, latest edition, the City of Irvine Standard Plans and these Special Provisions.

Signing and striping shall conform to part 2 signs & part 3 markings of the (MUTCD), latest edition, these Plans and Special Provisions.

Detail 9 lane line striping pattern in part 3 markings shall be used on all multilane streets regardless of street design speed.

Pavement legends shall match the City stencils (Hawkins stencils or equivalent).

All striping and pavement markings shall be reflectorized and applied in two coats. A minimum of seven days shall be provided between first and second coats.

The Contractor shall contact the City of Irvine inspection services for inspection 48 hours prior to beginning of construction.

Contractor shall verify all existing conditions and dimensions before starting work. If conditions exist which are contrary to those shown on these Plans, the City of Irvine inspection services shall be notified before proceeding with work.

Striping shall be cat tracked and approved by the Agency Representative prior to final installation.

Crosswalk shall conform to the City of Irvine Standard Plan No. 203.

314-4.3.6 Measurement and 314-4.3.7 Payment. *DELETE and SUBSTITUTE with the following:*
314-4.3.6 Measurement and Payment.

Payment for **STRIPING, MARKINGS AND MARKERS** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, removal of existing striping and markings and placing temporary striping and markings applying thermoplastic and painted traffic stripes and pavement markings, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

314-5 PAVEMENT MARKERS.

314-5.4 Placement. *MODIFY to ADD the following:*
All pavement markers shall comply with Sections 81 and 84 of the State Standard Specifications. Non-reflective markers shall be ceramic. All new markers shall have glass faces or be 3M series 290.

Blue raised reflective pavement marker shall be installed adjacent to all existing fire hydrants in accordance with the latest MUTCD.

314-5.6 Measurement and 314-5.7 Payment. *DELETE and SUBSTITUTE with the following:*

314-5.6 Measurement and Payment.

Payment for **STRIPING, MARKINGS AND MARKERS** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, removal of existing pavement markers and placing temporary pavement markers, installation of permanent pavement markers, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

ADD the following Subsection:

314-6 REMOVAL OF TRAFFIC STRIPING AND CURB AND PAVEMENT MARKINGS.

314-2.1 General. *MODIFY to ADD the following:*

All conflicting striping, pavement markings, and curb paint shall be removed by wet sandblasting or other approved method prior to installation of new striping. All conflicting raised pavement markers shall be removed.

Pavement that is damaged due to removal of markers or striping shall be repaired to the satisfaction of the Agency Representative.

PART 6 – TEMPORARY TRAFFIC CONTROL

REVISE as follows:

SECTION 600 – ACCESS

600-2 VEHICULAR ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*
Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to the extent that safe access may be provided, and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

Safe, adequate, continuous and unobstructed vehicular access shall be maintained to fire hydrants, residences, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, bus stops, hospitals, etc., unless otherwise approved by the Engineer.

During non-working hours or when work is not scheduled, all roadway lanes shall be returned to their full traffic use by backfilling and paving open trenches unless otherwise approved by the Engineer. At the end of the workday, the Contractor shall remove all Traffic Control Devices not in use.

The Contractor shall replace vehicle loop detectors damaged by the Contractor's operations, at its own expense within 24 hours of the damage. The Contractor shall replace existing loop detectors, shown on the Plans to be replaced, within 24 hours from when they are removed from service.

Should the Contractor fail to replace the vehicle loop detectors within 24 hours from when they are damaged or removed from service, or the installed signal loops are not functional, the Agency, at its option and at the Contractor's sole cost and expense, may install such temporary detection methods as may be necessary. The Agency will deduct cost of such work from any monies due the Contractor. Failure of the Agency, however, to install such temporary detection methods, shall not relieve the Contractor of his full responsibility for public safety per 7-10 of the Standard Specifications and the Special Provisions.

If the Contractor proposes temporary alternate detection methods, video or wireless, the Contractor shall provide submittals of the alternate methods for acceptance by the Engineer in accordance with 2-5.3 of the Standard Specifications and the Special Provisions. The cost for providing all temporary detection methods shall be as included in the various items of Work and no additional compensation will be allowed therefor.

600-3 PEDESTRIAN ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*
Safe, adequate, continuous and unobstructed pedestrian access shall be maintained to sidewalks, cross walks, residences, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, hospitals, etc., unless other arrangements satisfactory to the Agency have been made by the Contractor and

accepted by the Agency. Pedestrian access and paths shall meet federal, state and Agency ADA requirements.

ADD:

600-4 CONSTRUCTION PARKING CONTROL. The Contractor shall control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, owners operations, or construction operations, and monitor parking or construction personnel private vehicles by maintaining free vehicular access to and through parking areas and prohibit parking on or adjacent to access roads, or in non-designated areas.

ADD:

600-5 SITE ACCESS. When entering or leaving roadways carrying public traffic, contractors' equipment, whether empty or loaded, shall in all cases yield to public traffic.

The Contractor shall comply with the following City of Irvine truck route restrictions:

DESIGNATED TRUCK ROUTES - ORD. NO. 92-09

	Name of Street	Portion Designated
a)	Alton Parkway	Sand Canyon Avenue to Irvine Boulevard
b)	Bake Parkway	Rockfield Boulevard to easterly City limit
c)	Barranca Parkway	Red Hill Avenue to Jamboree Road
d)	Campus Drive	Jamboree Road to MacArthur Boulevard
e)	Irvine Boulevard	Culver Drive to Jeffrey Road
f)	Irvine Boulevard	Alton Parkway to easterly City limit
g)	Jamboree Road	Warner Avenue to MacArthur Boulevard
h)	Laguna Canyon Road	Alton Parkway to State Route 133
i)	Laguna Freeway (133)	
j)	MacArthur Boulevard	Daimler Street. to Campus Drive
k)	MacArthur Boulevard	Jamboree Road to Ford Road
l)	Main Street	Jamboree Road to westerly City limit
m)	Red Hill Avenue	Barranca Parkway to San Diego Fwy. (I-405)
n)	Rockfield Boulevard	Bake Parkway to easterly City limit
o)	Sand Canyon Avenue	San Diego Fwy. (I-405) to northerly City limit
p)	San Diego Fwy. (I-405)	
q)	Santa Ana Fwy. (I-5)	

RESTRICTED ROUTES, SEVEN TON (14,000 POUNDS) GROSS WEIGHT - ORD. NOS. 92-09 AND 98-16

	Name of Street	Portion Designated
a)	Campus Drive	Jamboree Road to University Drive

b)	Culver Drive	Santa Ana Fwy. (I-5) to northerly City limit
c)	Jeffrey Road	Irvine Center Drive to Santa Ana Fwy. (I-5)
d)	Jeronimo Road	Goodyear to 400 feet westerly of Bake Pkwy.
e)	Toledo Way	Goodyear to 400 feet westerly of Bake Pkwy.
f)	Trabuco Road	400 feet easterly of the northbound Santa Ana Freeway off-ramp near Culver Drive and the easterly City limits
g)	Walnut Avenue	Harvard Avenue to Culver Drive
h)	Harvard Avenue	Walnut Avenue to Irvine Center Drive

THREE TON (6,000 POUNDS) GROSS WEIGHT - ORD. NO. 92-09

	Name of Street	Portion Designated
a)	Bonita Canyon Road/Shady Canyon	Newport Coast Drive to Sunnyhill
b)	Culver Drive	Michelson Drive to Bonita Canyon Road
c)	University Drive	Ridgeline Drive to Harvard Avenue

SECTION 601 – WORK AREA TRAFFIC CONTROL

REVISE as follows:

601-1 GENERAL. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall provide and maintain all construction area traffic controls in accordance with Part 6 of the Standard Specifications, the latest version of the (MUTCD), and Work Area Traffic Control Handbook (WATCH), and these Special Provisions.

Portable delineators (traffic cones are not allowed) which conform to the current California Manual of Uniform Traffic Control Devices (CA MUTCD) shall be spaced as necessary for proper delineation of the travel way. The spacing between delineators shall not exceed 50 feet. The minimum lane transitions shall be a 50 to 1 taper unless otherwise shown on the Plans. Double base delineators will be required.

If the portable delineators are damaged, displaced or are not in an upright position, from any cause, said portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Where construction detours and signing conflict with existing signing, the Contractor shall cover existing signs in a manner approved by the Agency's Representative. The Contractor shall also provide temporary traffic delineation per 602 at the conclusion of each working day, if not sooner, as directed by the Agency's Representative, for any centerline, painted median or lane line which is obliterated by construction.

The Contractor shall provide temporary delineation as directed/accepted. Temporary delineation shall include removal of conflicting markings by accepted means; installation and removal of temporary centerlines or lane lines, detour signing, barricading; and

replacement of traffic lines and markings in their proper locations upon termination of the detour. Conflicting existing and temporary striping, as required for traffic control during construction, shall be removed by the Contractor by methods accepted by the Engineer. Blacking out the pavement will not be allowed. Temporary reflective striping tape may be used, except that it shall not be applied to final asphalt surfaces. Tape shall be removed from temporary surfaces prior to placement of additional asphalt.

The Contractor shall maintain a 24-hour emergency service to remove, install, relocate, and maintain warning devices and shall furnish to the Agency's Representative, names and telephone numbers of three persons responsible for this emergency service. In the event the Contractor does not promptly respond when notified, the Agency may make corrections at Contractor's expense.

Each workday, the Contractor shall ensure traffic control is in place prior to starting construction.

Should the Contractor appear, in the opinion of the Engineer, to be lacking in providing adequate warning devices and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor, at his/her expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.

The Contractor shall notify local Police and Fire Departments of its intent to begin work at each location at least ten (10) days before work is to begin. The Contractor shall cooperate with local authorities relative to handling traffic through the area. The Contractor shall also coordinate with OCTA to ensure the safe operation of buses and access to bus stops in the construction area.

No work that interferes with public traffic shall be performed except during the hours specified for lane closures 601-6.6.

Existing traffic loop detector replacement shall be required as necessary such that no traffic signal loop is out of operation at the end of the workday. The cost for providing all temporary traffic signal loop detectors shall be included into the various related items of work and no additional compensation will be allowed; this includes traffic signal loop detectors damaged by the Contractor's operations not designated for replacement in the contract plans.

Areas requiring edge cold mill shall be cold milled not more than three (3) Calendar Days prior to AC paving. Areas requiring digouts shall be repaved and open for traffic at the end of the same day.

The Contractor shall maintain access to all driveways at all times.

601-2 TRAFFIC CONTROL PLAN (TCP). *DELETE in their entirety 2nd, 3rd and 4th paragraphs and SUBSTITUTE with the following:*

If required by the Contract documents or the Contractor requests a deviation from the construction staging/traffic control included in the Contract Documents, the Contractor shall provide a plan prepared and stamped by registered civil engineer in the State of California for approval by the Agency prior to commencing Work of the Contract. Allow a minimum of fifteen (15) Working Days for the first Agency review and ten (10) Working Days for subsequent reviews.

The Contractor shall legibly indicate the following information on a reproducible drawing.

a) All lane closures and/or detours anticipated during construction.

b) Temporary signage, striping and delineation.

c) Special traffic control requirements.

The Contractor shall submit two (2) prints of approved drawings to Agency Representative, and retain one (1) print at construction site.

601-3 PAYMENT. *MODIFY to ADD the following:*

Payment for **TRAFFIC CONTROL** shall be made at the contract **Lump Sum (LS)** price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for preparing traffic control plans, doing all the work involved in all temporary traffic control related work (excluding K-rails and sand-filled crash cushions – see separate payment clause in the paragraph below) involving placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of traffic control system, complete in place, all associated temporary signing and striping; flashing arrow signs; flagging and/or flagger costs; and project notifications, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **TEMPORARY CONCRETE BARRIER (K-RAILS)** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of K-rails, installation of 20-foot and 10-foot segments of K-rails as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **SAND FILLED CRASH CUSHIONS** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of sand filled crash cushions, installation of sand filled crash cushions, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

ADD:

601-4 STREET CLOSURE, DETOURS, BARRICADES. Unless shown on the plans, no street closure shall be allowed.

The Contractor shall construct the proposed improvements to minimize public inconvenience. The Contractor shall provide ADA accessible pedestrian detours around construction areas.

The Contractor shall have all Traffic Control Devices properly installed prior to commencing construction and shall maintain these devices to ensure proper flow and safety of traffic while working in the street.

The contractor shall be responsible for any additional Traffic Control Devices deemed necessary by the Engineer to assure public safety at all times.

ADD:

601-5 STORAGE OF EQUIPMENT. Unless otherwise authorized in writing by the Engineer, construction materials may not be stored in streets, roads, or highways beyond the end of each Working Day. No equipment shall be stored within limits of the acquired temporary construction easements at any time.

Construction equipment shall not be stored at the work site before its actual use on the Work nor for more than two (2) Calendar Days after it is no longer needed on the Work. Time necessary for repair or assembly of equipment may be authorized by the Agency.

Excavated materials, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, temporary construction easements, or highway unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

The Contractor shall submit an equipment-staging plan for approval by the Engineer. The plan shall address the use of private property for the staging, unloading, loading, and storing of equipment. The Contractor shall obtain an agreement from private property owners prior to the start of the project. The agreement shall release and hold the Agency, the Engineer, the Agency Representative and their consultants harmless from claims for damages. Failure to file a plan or obtain written approval from private property owners is considered a breach of Contract and subject to all remedies and enforcement procedures specified in the Contract Documents.

ADD:

601-6 TRAFFIC REGULATIONS.

601-6.1 General. Furnish, install and maintain Traffic Control Devices, equipment, materials, and other safeguards to provide safe and effective work areas, and to warn, control, protect and expedite vehicular and pedestrian traffic.

On daily basis, remove temporary traffic delineation, signage and other devices when no longer required. Restore areas to original or to specified conditions.

601-6.2 Related Requirements. Traffic control work and Traffic Control Devices for construction shall conform to the latest edition of:

a) MUTCD

b) Work Area Traffic Control Handbook (WATCH manual)

c) Standard Specifications

d) O.S.H.A. requirements

e) California Vehicle Code

601-6.3 Construction Area Signs. The Contractor shall:

a) Use only signs that conform to the dimension, color, legend, reflectorization and lighting requirements of the current WATCH, MUTCD and the Contract Documents.

b) All sign panels shall be the product of a commercial sign manufacturer, but need not be new. Used sign panels clean and in good repair, as determined by the Agency Representative, may be used.

c) Sign panels for portable signs may be metal, cotton drill fabric, flexible industrial nylon fabric or other approved fabric.

d) Temporary stop signs shall have a minimum clearance of seven (7) ft. from bottom of sign to existing ground or pavement.

e) Further requirements as discussed in the Contract Documents.

601-6.4 Flaggers. The Contractor shall provide flaggers as deemed necessary by the Engineer to give adequate warning to traffic or to the public of any dangerous conditions to be encountered, and employ only flaggers trained in flagging fundamentals and procedures referred to in the "Flagger Handbook" available on the Internet at the following web site: http://www.dot.ca.gov/hq/construc/flagging/flagging_handbook.pdf.

Payment for flagging is considered as included in the various items of work and no additional compensation will be allowed therefor.

601-6.5 Temporary Closure of Existing Traffic Lanes. Unless the traffic control, working hours and lane requirements are modified in the Special Provisions, the following requirements shall be followed:

When permitted by the Engineer, one (1) lane on each roadway adjacent to the working area may be closed to public traffic. Use of reflective or lighted traffic delineators to direct traffic away from excavations or other obstructions will be considered as a lane closure.

a) A minimum of one (1) lane of traffic, twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times.

b) A minimum of two (2) lanes of traffic, each being twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times when the work area is within a major arterial highway unless otherwise approved.

c) When work is in progress within three (3) feet of a lane being used by public traffic, Contractor shall close the lane adjacent to the work. Reflective or lighted traffic delineators shall be placed to direct public traffic around the construction area in accordance with the requirements of this section. During non-working hours or when work is not in progress, position and maintain reflective traffic delineators in the 1 to 1-1/2 foot width of the existing traffic lane adjacent to the work.

d) On roads open to public travel, temporary lane closures are limited between the hours of 9:00 a.m. and 3:00 p.m. Closures of roads on Sundays, holidays, or between the hours of 3:00 p.m. and 9:00 a.m. are prohibited unless otherwise approved by the Engineer.

All Traffic Control Devices used between dusk and 6:00 a.m. shall be lighted or reflectorized. Agency approved arrow board(s) shall be used to direct public traffic on all roads.

Prior to the start of each work day, the Contractor shall perform all necessary work incidental to and commensurate with the proper signing, detouring, barricading, etc., that is required for that particular day's schedule of operations. No construction shall be permitted until such signing and detouring operations have been completed.

601-6.6 Lane Requirements/Working Hours.

Working Hours:
Monday through Friday (daytime): 7:00 a.m. to 7:00 p.m.
Monday through Friday (nighttime): 10:00 p.m. to 5:00 a.m.
Saturday (daytime): 9:00 a.m. to 6:00 p.m.
Sunday (nighttime): 10:00 p.m. to 12:00 a.m.
Legal holidays: No work permitted

Work requiring lane closures may be in progress during the following hours:
Monday through Friday (daytime): 9:00 a.m. to 3:00 p.m.
Monday through Friday (nighttime): 10:00 p.m. to 5:00 a.m.
Saturday (daytime): 9:00 a.m. to 3:00 p.m.
Sunday (nighttime): 10:00 p.m. to 12:00 a.m.
Legal holidays: No work permitted

Lane closures are permitted and will only occur in accordance with the lane closure chart below, unless otherwise approved by the Engineer.

No lane closures will be permitted on the following dates:

2017
DATE(S): EVENT
4/15: Celebrate UCI
5/6: Concordia University Graduation
5/13: UCI School of Law Hooding
5/27: Mater Dei High School Graduation
5/28: Lutheran High School Graduation
6/4: Santa Margarita High School Graduation
6/5: UCI School of Medicine Commencement

6/7: University/Northwood High School Graduation
6/8: San Juan Hills High School Graduation
6/15 to 6/17: Mesa Court Move Out
6/16 to 6/19: UCI Commencement
7/30 to 8/25: RAMS Training Camp (First week is the highest visitor count)
9/19 to 9/20: Mesa Court Move In
12/2: Run for a Claus

2018

DATE(S): EVENT

3/28 to 3/29: Children's Water Festival
4/14: Celebrate UCI
5/5: Concordia University Graduation
5/5: UCI School of Law Hooding
5/26: Mater Dei High School Graduation
5/27: Lutheran High School Graduation
6/1: Santa Margarita High School Graduation
6/2: UCI School of Medicine Commencement
6/6: University/Northwood High School Graduation
6/7: San Juan Hills High School Graduation
6/9 to 6/14: Mesa Court Move Out
6/15 to 6/18: UCI Commencement

CHART NO. 1

University Drive Closure Chart
Lane Requirements

City: Irvine
Closure Limits: Westbound and eastbound between MacArthur Boulevard SB Ramps and 900' ± east of Campus Drive

From Hour to Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Fridays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N	
Mondays through Fridays (Nightime)	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2	
Saturdays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N	
Sundays (Nighttime)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2	

Legend:
2 Provide at least two (2) lanes open in direction of travel on University Drive.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

CHART NO. 2

MacArthur Boulevard NB Ramp Closure Chart
Lane Requirements

City: Irvine
Closure Limits: Northbound between University Drive to 300' ± south of University Drive

From Hour to Hour 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Fridays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Mondays through Fridays (Nightime)	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2
Saturdays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Sundays (Nighttime)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2

Legend:
2 Provide at least two (2) lanes open in direction of travel on MacArthur Boulevard.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

CHART NO. 3

California Avenue Closure Chart
Lane Requirements

City: Irvine
Closure Limits: Northbound and southbound between University Drive and 250' ± south of University Drive

From Hour to Hour 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Fridays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Mondays through Fridays (Nightime)	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2
Saturdays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Sundays (Nighttime)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2

Legend:
2 Provide at least two (2) lanes open in direction of travel on California Avenue.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

CHART NO. 4

Mesa Road Closure Chart
Lane Requirements

City: Irvine
Closure Limits: Northbound and southbound between University Drive and 200' ± south of University Drive

From Hour to Hour 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Fridays (Daytime)	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Mondays through Fridays (Nightime)	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1
Saturdays (Daytime)	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Sundays (Nighttime)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1

Legend:
1 Provide at least one (1) lane open in direction of travel on Mesa Drive.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

CHART NO. 5

Campus Drive Closure Chart
Lane Requirements

City: Irvine
Closure Limits: Northbound and southbound between 500' ± north of University Drive and 300' ± south of University Drive

From Hour to Hour 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Fridays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Mondays through Fridays (Nightime)	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2
Saturdays (Daytime)	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N
Sundays (Nighttime)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	2

Legend:
2 Provide at least two (2) lanes open in direction of travel on Campus Drive.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

601-6.7 Closure Schedule. The Engineer shall be provided a list of any street lane closures, ramp closures, trail closures, sidewalk closures or detours for review and acceptance at least three (3) weeks advance of the closure.

Contractor shall submit a written schedule of planned closures utilizing the closure schedule request form, furnished by the Engineer. The closure schedule shall show the number of lanes, locations and times of the proposed closures, a precise description of work to be performed. Closure schedules submitted to the Engineer with incomplete or

inaccurate information will be rejected and returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Upon approval of the closure schedule by the Engineer and at least three (3) Working Days in advance of closing a lane, the Contractor shall notify the Police, Fire, Orange County Transportation Authority (OCTA) bus service, the Agency Representative and all other affected jurisdictional agencies, and comply with their requirements.

Closure schedule amendments, including adding additional closures, shall be submitted by noon to the Engineer, in writing, at least five (5) Working Days in advance of a planned closure. Approval of closure schedule amendments will be at the discretion of the Engineer.

The Engineer, the Police, Fire, Orange County Transportation Authority (OCTA) bus service, and all other affected jurisdictional agencies shall be notified of cancelled closures two (2) Working Days before the date of closure

The Contractor shall notify by email the City of Irvine four (4) Working Days prior to commencing any work within 250 feet of any signalized intersection (measured from the nearest cross street curb), implementing any road closure, and/or implementing any detour of traffic. Email notifications shall be sent to roadworkcoordination@cityofirvine.org.

Closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer.

601-6.8 Late Reopening of Closures and Required Contingency Plan. If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in 6-3 of the Special Provisions. No further closures shall to be made until the Engineer has accepted a contingency plan, submitted by the Contractor that will ensure future closures will be reopened to public traffic at the specified time. A detailed contingency plan shall be prepared and submitted to the Engineer within one business day of the Engineer's request. The Engineer will have two (2) Working Days to accept or reject the Contractor's proposed contingency plan. The Contractor will not be entitled to compensation for the suspension of work resulting from the late reopening of closures.

601-6.9 Compensation. The Engineer shall be notified of delays in the Contractor's operations due to the following conditions:

a) The Contractor's proposed closure schedule is denied and his planned closures are within the time frame allowed for closures in the Special Provisions, except that the Contractor will not be entitled to compensation for amendments requested by the Contractor to the closure schedule that are not approved.

b) The Contractor is denied a confirmed closure.

If, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of these conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling

of forces, equipment and plant, the delay will be considered a right of way delay and will be compensated in conformance with the provisions in 2-8 of the Standard Specifications and the Special Provisions.

Should the Engineer direct the Contractor to remove a closure before the time designated in the approved closure schedule, delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay and compensation for the delay will be determined in conformance with the provisions in 2-8 of the Standard Specifications and these Provisions.

601-10 AUTHORITY OF AGENCY REPRESENTATIVE. Provisions of this section may be modified or altered if, in the opinion of the Agency Representative, public traffic will be better served and work expedited.

601-10.1 Execution. The Contractor shall field check all temporary traffic control signs, barricades, and other devices at least three (3) times every day, including Saturdays, Sundays and holidays to insure their proper maintenance and conformance to the Contract Documents and detailed instructions by the Agency Representative.

Should Contractor fail to properly place and/or maintain delineated lane closures or work areas, the Agency, at its option and at Contractor’s sole cost and expense, may place delineation, barricades, or other devices, as may be necessary, to protect the public. Agency may in its discretion withhold the cost of such work from any monies due the Contractor at an amount equal to the rates shown below:

<u>Delineation</u>	
Delineator	$2.00/day plus-labor & equipment
Lighted Barricade	$5.00/day plus-labor & equipment
8 Foot Wood Barricade	$7.50/day plus-labor & equipment
Temporary Signs	$25.00/day plus-labor & equipment
Type III Barricade	$10.00/day plus-labor & equipment
<u>Labor (2 Hour Minimum) - Regular Time</u>	
Lead Street Maintenance Technician	$52.88
Street Maintenance Technician	$40.82
Equipment Operator I	$46.14
Equipment Operator II	$49.74
Street Maintenance Supervisor	$62.99
Street Superintendent	$79.80
<u>Equipment</u>	
Arrow Board	$15.00/hour
Pickup	$10.00/hour
Sweeper	$45.00/hour

5-Yard Dump	$25.00/hour
Loader	$25.00/hour
Water Truck	$25.00/hour
1-Ton Truck	$10.00/hour

Agency shall have no obligation to Contractor with respect to Agency's decision whether or not to exercise Agency's options pursuant to this subsection.

ADD:

601-11 PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS). Portable changeable message signs shall be furnished, placed, operated, and maintained as designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these Provisions. The Contractor shall furnish 6 **(six)** PCMS. PCMS shall be in place a minimum of two (2) weeks prior to start of construction.

Approximate locations of the PCMS are as follows:

a) Eastbound University Drive, west of Macarthur Boulevard
b) Westbound University Drive, east of Campus Drive
c) Northbound Campus Drive, south of University Drive
d) Southbound Campus Drive, north of University Drive
e) Northbound Mesa Drive, south of University Drive
f) Northbound California Avenue, south of University Drive

601-11.1 Payment. Full compensation for conforming to the requirements for PCMS, including furnishing all labor, tools, equipment, materials and incidentals required for doing all the work involved in furnishing, installing, maintaining, relocating, changing sign message (regardless of the number of times directed by the Engineer), replacing, repairing, and when no longer required, removing of all PCMS as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, shall be considered as included in the contract **Lump Sum (LS)** price bid for **TRAFFIC CONTROL** and no separate compensation will be allowed therefor.

601-12 FLASHING ARROW SIGNS. Flashing arrow sign shall be mounted on a truck or on a trailer and shall be capable of operating while the vehicle is moving or as directed by the Engineer. Signs mounted on the cab of a truck shall be mounted to provide a minimum of 7 feet between the bottom of the sign and the roadway. Signs mounted on a trailer, or on anything other than the cab of a truck, shall be mounted to provide a minimum of 8 feet between the bottom of the sign and the roadway.

The total weight of trailer mounted flashing arrow sign including the trailer, sign, power source and other components shall not exceed 1,500 pounds and the height of the level trailer bed shall be no higher than 21 inches above the roadway. The trailer shall be equipped with a minimum of 3 leveling jacks.

Electrical energy to operate the sign shall be obtained from the vehicle on which the sign is mounted. The supply of electrical energy shall be capable of operating the sign in the manner specified. The electronic circuitry shall provide between 30 and 45 complete operating cycles of the sign per minute in each of the modes specified.

Alternative types of lamps may be used in flashing arrow signs if visibility is equal to the specified lamps. Each type AX flashing arrow sign shall be a minimum of 2 feet high and 4 feet wide, and shall be furnished with flat black enamel. A minimum of 13 No. 4414AX 12-volt, yellow or amber lamps shall be installed in the panel. The lamp configuration shall be for 3 arrowheads or an arrow shaft with 2 arrowheads, one pointing in each direction on the face of the sign with a minimum of 5 lamps forming each arrowhead. Each lamp shall be provided with a visor.

The lamp shall be activated by a switch on a control panel and shall be controlled by electronic circuitry to provide a minimum of 4 selectable modes of operation as follows:

Pass Left Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the left or a flashing left arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Pass Right Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the right or a flashing right arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Simultaneous Mode - Either the outside arrowheads pointing in opposite directions are continuously illuminated, except for the center lamp forming each arrowhead, while the arrow shaft lamps flash on and off simultaneously or the outside arrowhead pointing in opposite directions and the arrow shaft lamps all flash simultaneously to indicate passing on either side.

Travel Mode - Travel or caution mode shall flash in a manner not resembling any other mode.

Full compensation for conforming to the requirements of this section shall be considered included in the contract **Lump Sum (LS)** price bid for **TRAFFIC CONTROL** and no additional compensation will be allowed therefor.

PART 7 - STREET LIGHTING AND TRAFFIC SIGNAL SYSTEMS

SECTION 700 – MATERIALS

700-1 GENERAL. *After last paragraph, ADD the following:*

The City maintains a Traffic Signal Qualified Product List (QPL) included Section 209- 6 of the Special Provisions. The City Engineer shall not be precluded from sampling and testing products on this list. The manufacturer of the product on the QPL shall furnish the City Engineer a Certificate of Compliance in accordance with subsection 4-1.5 "Certificate of Compliance" of these Special Provisions for each type of material supplied.

Requests for substitutions shall be in accordance with subsection 4-1.6 "Trade Names or Equals" of the Standard Specifications and these Special Provisions.

In addition to the requirements of the Plans, Specifications, and Special Provisions, components shall conform, where applicable, to the following:

a) NEMA
b) UL
c) EIA
d) RUS
e) Aluminum Association Publication 30
f) ANSI
g) AASHTO "Standard Specification for Structural Support for Highway Signs, Luminaires and Traffic Signals"
h) ETL
i) IEEE
j) IMSA
k) MIL SPEC
l) AWS D1.1 "Structural Welding Code"
m) FCC
n) California Administrative Code, Title 8, Chapter 4, Subchapter 5
o) NEC
p) The State Standard Specifications and State Standard Plans
q) The CA MUTCD (latest edition)

700-3.5 Conduit.
REVISE as follows:

700-3.5.2 Rigid Metallic Conduit. *DELETE in its entirety.*

700-3.5.3 Galvanized Pipe. *DELETE in its entirety.*

700-3.5.4 Rigid Non-Metallic Conduit. *DELETE in its entirety and SUBSTITUTE with the following:*

Rigid non-metallic conduit shall conform to the requirements of the UL Standard for Rigid

Non-Metallic Conduit, Publication UL651 and UL 651B, and the State Standard Specifications Section 86-2.05A. Rigid non-metallic conduit connections shall be of the solvent weld type. Unless otherwise indicated, the minimum trade size and type of conduit shall be:

A. All primary signal wiring and interconnect conduits at the intersection, including street crossings, between boxes on the corners, and cabinet entry conduits shall be 4 inch.

B. Conduits for service wiring, primary pole entry and signal interconnect between intersections, except street and driveway crossings, shall be 3 inch.

C. Conduits for advance DLC, extending beyond the BCR box, shall be 2-1/2 inch.

D. Conduits for Type 1 pole entry shall be 2 inch.

E. Conduits for pedestrian push button pole entry shall be 1-1/2 inch.

F. Conduit installed behind curbs, other than foundation entry, shall be schedule 40 PVC.

G. Conduit installed beneath roadway, driveways and foundation entry shall be schedule 80 PVC.

700-3.7 Pull Boxes. *After the 1st paragraph, ADD the following:*

1 Traffic signal wiring and interconnect boxes shall be No. 6 size (17½-inch x 30½-inch lid), per the State Standard Plans plan ES-8B, with a lightweight lid and "TRAFFIC SIGNAL" marking, unless otherwise noted on the Plans.

2 Electrical service boxes shall be No. 5 size (13¾-inch x 23¼-inch lid), per State Standard Plan ES-8B, with a lightweight lid and "EDISON" marking.

3 Communications electrical boxes and primary signal wiring boxes, for storage of wire and cable adjacent to traffic signal cabinets, shall be B40 size (24 – inch x 35 ½ – inch lid) with a lightweight polymer lid and "TRAFFIC SIGNAL" marking.

700-3.10 Services.
REVISE as follows:

700-3.10.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

Service conduit shall conform to the requirements of the serving utility and shall not be less than 3 inches in diameter.

Services enclosures shall conform to the Irvine Traffic Signal Standard Plan TS-7, shall be from a manufacturer listed on the Irvine Traffic Signal QPL, and shall have the following characteristics:

1. Rating: NEMA 3X enclosure and UL listed assembly

2. Main breaker capacity: 100-amp

3. Type: Modified State Standard Type-II for mounting to the side of a traffic signal controller cabinet with integral Battery Backup System (BBS).

4. Size: Enclosure width and height shall approximate the sidewall dimensions of the intended traffic signal cabinet.

5. Construction: Aluminum

6. Color: The service enclosure shall be powder coated the same color as the traffic signal cabinet, Irvine beige #20475.

7. Photoelectric Control (PEC): The service shall have a PEC controlled safety lighting circuit with a replaceable PEC located in the Service provider section and a test switch located in the Agency accessible section. The PEC window shall have a protective shroud to shield the PEC from headlights and warning beacons. Output switching shall be accomplished by the use of a solid state contactor. No mercury contactors will be allowed.

8. Circuits: The service shall provide for the following circuits using independent breakers:

8.1. Metered circuits shall be provided for traffic signal cabinet (40-amp), street name signs (15-amp), CCTV (15-amp), as well as two spare breakers (15- amp).

8.2. Unmetered circuits shall be provided for safety lighting (30-amp) and control (15-amp).

9. Door Lock Mechanism: The service enclosure door shall have a 3-point locking mechanism with a Corbin No.2 lock.

10. Battery Backup System (BBS): The service enclosure shall house an integral battery backup system as defined in subsection 209-3.10.2.

The following locations shall receive new Type IIB Service/BBS enclosures which is also shown in the Plans:

<u>Type IIB Service/BBS Enclosures for Type 332L Cabinet</u>

1. University Drive at MacArthur Boulevard N/B Ramps
2. University Drive at California Avenue
3. University Drive at Mesa Road

The following location shall reuse the existing Type IIB Service/BBS enclosures which is also shown in the Plans:

1. University Drive at Campus Drive

Contractor shall coordinate with SCE and contact Sup Chomsevi at (949) 458-4623 at a minimum of four (4) weeks in advance to coordinate meter change work order.

700-3.10.2 Battery Backup System (BBS).

Service enclosure assemblies shall include a BBS. The BBS system shall consist of bypass switch, Power Transfer Relay, BBS inverter, and batteries as shown in the City of Irvine Traffic Signal Standards Plan TS-7. Contractor shall provide all required cabling for the BBS system.

Contractor shall refer to the Plans for BBS assembly location. Per the Plans, the following intersections shall receive a new BBS:

1. University Drive at MacArthur Boulevard N/B Ramps
2. University Drive at California Avenue
3. University Drive at Mesa Road

Per the Plans, the following intersections shall reuse the existing BBS:

1. University Drive at Campus Drive

700-5.3 Conductors and Cable.
REVISE as follows:

700-5.3.1 General.

TABLE 700-5.3.1 *REVISE the following:*

Circuit	**Signal Phase or Function**	**Identification**			**Size**
		Insulation Colors		**Band Symbols**	
		Base	**Stripe**		
Sign Lighting	Ungrounded Line	Orange	White	NBR	14
Grounded and Common	Sign Lighting	White	Orange	NBR	14

700-5.3.3 Interconnect Cable. *DELETE in its entirety.*

700-5.3.4 Fiber Optic Cable.
REVISE as follows:

700-5.3.4.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

Signal Interconnect Cable (SIC) shall consist of two separate fiber optic cables; one 60-fiber hybrid multi-mode/single-mode cable and one 12-fiber single-mode cable as defined herein and on the Irvine Traffic Signal Standards Plan TS-3. Agency approved materials are listed on the Irvine Traffic Signal QPL. The 60-fiber hybrid cable shall contain 24

strands of multi-mode fiber and 36 strands of single-mode fiber. Multi-mode optical fiber shall have a nominal core diameter of 62.5 microns and a nominal cladding diameter of 125 microns.

700-5.3.4.2 Performance. *DELETE in its entirety and SUBSTITUTE with the following:*

Optical fiber shall be manufactured by Corning and meet the following minimum performance specifications:
Table 700-5.3.4.2 (A)

Fiber Type	Test Wavelengths (nm)	Maximum Attenuation (db/km)	Minimum Bandwidth (MHz)
Multi-mode	850	3.5	200
	1300	1.0	500
Single-mode	1310	0.4	-
	1550	0.3	-

700-5.3.4.3 Construction. *DELETE in its entirety and SUBSTITUTE with the following:*

The fiber optic cables shall be constructed as shown on the Irvine Traffic Signal Standards Plan TS-3. The construction shall be non-armored, loose-tube, completely dielectric, and free of gel. Water-swellable tape and yarns shall be incorporated to inhibit water intrusion. The buffer tubes shall be 3.0 mm diameter, each containing 6 optical fibers. The color codes and order for tubes and fiber strands shall be as shown on the Irvine Traffic Signal Standards Plan TS-3.

700-5.3.4.5 Identification. *ADD the following:*

Fiber optic cables must have “Corning Optical Cable” or “Corning Optical Fiber” on the labeling to identify the cable or optical fiber manufacturer.

700-5.4 Controllers.
REVISE as follows:

700-5.4.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

The traffic signal controller assembly shall be an Irvine ATMS 332L as defined herein, in the Plans, and in accordance with the Irvine Traffic Signal Standards Plan TS-9C.

ADD the following subsection:
700-5.4.1.1 Signal Control Cabinet Assembly.

Contractor shall refer to the Plans for controller cabinet assembly location. Per the Plans, the following intersections shall receive new 332L controller cabinet assemblies:

1. University Drive at MacArthur Boulevard N/B Ramps
2. University Drive at California Avenue
3. University Drive at Mesa Road

Per the Plans, the following intersections shall reuse the existing ATMS Dual 332L controller cabinet assembly:

1. University Drive at Campus Drive

Contractor shall keep existing traffic signal controller cabinet functional while new traffic signal controller cabinet is installed.

The signal control cabinet assemblies shall include the following components:

1. 2070E controller as defined in subsection 700-5.4.6 of these Special Provisions

2. Detection and isolation subsystem as defined in subsection 700-5.4.7 of these Special Provisions

3. Load control subsystem as defined in subsection 700-5.4.8 of these Special Provisions

4. Power distribution subsystem as defined in subsection 700-5.4.9 of these Special Provisions

5. Signal monitor unit as defined in subsection 700-5.4.10 of these Special Provisions

6. Fiber Interconnect Unit (FIU) as defined in subsection 700-5.4.11 of these Special Provisions

7. Communications data network as defined in subsection 700-5.4.12 of these Special Provisions

8. Retractable document storage tray below the controller

9. Call input test panel as defined in subsection 700-5.4.13 of these Special Provisions

10. Removable manual control pushbutton with coiled cable

11. Front and rear door florescent lighting (downward reflectorized) with door-actuated switches

700-5.4.3.2 Steel Cabinets. *DELETE in its entirety.*

700-5.4.3.3 Stainless Steel Cabinets. *DELETE in its entirety.*

700-5.4.3.4 Aluminum Cabinets. *DELETE requirement c in its entirety and SUBSTITUTE the following:*

Interior and exterior cabinet surfaces shall be powder coat finished in a beige color, color number FS20475, Federal Standard 595C with a gloss level of 60 or higher.

ADD the following subsection:
700-5.4.4.5 Contactor.

The power distribution assembly shall utilize a solid state type contactor. No mercury type contactors will be allowed. The contactor shall have a minimum rating of 50A, per contact, inductive load.

700-5.4.5 Dual 5-Way Active Data Bridge. *DELETE this subsection in its entirety.*

ADD the following subsections:
700-5.4.6 Controller Unit.

The Irvine traffic signal controller unit shall be a 2070E controller as defined in the 2009 TEES. The controller unit shall be from a manufacturer approved on the Irvine Traffic Signal QPL. The controller shall include 2070-1C CPU, 2070-3B (8-line) display, 2070- 4A power supply, 2070-2A I/O, and 2070-7A serial communication modules.

Firmware: The 2070E controller shall be delivered pre-loaded with Econolite ASC/3-2070 firmware, unless otherwise specified in the project specifications.

ATMS cabinet installations shall include a factory produced category 6 network cable with a minimum length of 15 feet to interface the 2070E controller to the communications network switch.

Contractor shall refer to the Plans for controller unit installations. Per the Plans, all new controller cabinet assemblies listed in section 700-5.4.1.1 shall receive new controller units.

700-5.4.7 Detection and Isolation Subsystem.

Input Files: Irvine ATMS 332L signal control cabinets shall include two input file assemblies. Each input file shall be a TEES 332L standard, 14-channel unit with PC backplane, from a manufacturer approved on the most recent SQPL under the “Model 332L Cabinets” section or as amended by the Irvine Traffic Signal QPL. The input file slots shall be allocated and labeled as shown on the Irvine Traffic Signal Standards Plan TS-9C.

700-5.4.8 Load Control Subsystem.

Output and auxiliary files: Irvine ATMS signal control cabinets shall include one TEES 332L standard, 12-position output file and one 6-position auxiliary file. The load control subsystem shall be fully populated with sixteen (16) Model 200 Switch Packs and all relays. Switch Packs shall be compatible for use with a model 2010 SMU with plus features activated (PDC SSS-86-3 or equivalent). All load control subsystem components shall be from a manufacturer approved on the Irvine Traffic Signal QPL. The output and auxiliary file slots shall be labeled for phase and function.

700-5.4.9 Power Distribution Subsystem.

The main power distribution assembly shall be a TEES 332L standard PDA No. 2L unit. The PDA No. 2L shall be populated with two (2) Model 204 flashers and a high efficiency (>80% at ½ load) Model 206L or 206G power supply. All power distribution subsystem components

shall be from a manufacturer approved on the most recent SQPL under the “Model 206L Power Supply Module” sections or as amended by the Irvine Traffic Signal QPL.

700-5.4.10 Signal Monitor Unit.

The Signal Monitor Unit (SMU) shall be a 16-channel, RMS voltage monitoring, model 2010 with red-yellow-green displays for all phases, event recording, and an Ethernet communications port. Each SMU installation shall include a program card and red monitor interface cable. Agency approved models are listed on the Irvine Traffic Signal QPL.

700-5.4.11 Fiber Optic Interconnect Unit.

Cabinet assemblies shall include a Fiber Optic Interconnect Unit (FIU) to provide for termination of fiber optic cable. The FIU shall be assembled from components listed on the Irvine Traffic Signal QPL, unless otherwise specified in the Plans. The exact quantities of components required shall be defined by the fiber charts provided by the Agency before signal turn-on.

700-5.4.12 Communication Data Network.

Data switches shall be removed and salvaged from existing controller assemblies and reinstalled in new controller assemblies.

Data switches shall meet the minimum standards listed below and shall fully integrate with the Irvine ‘CiscoWorks’ network management and Cisco Secure Access Control systems. The components listed on the Irvine Traffic Signal QPL have been verified to meet or exceed the minimum standards.

Minimum required switch standards:

- Wire speed switching
- NEMA TS-2
- Operational temperature range of -40 to +70 degrees Celsius
- Mean Time Between Failure (MTBF) rating of at least 30 years
- Virtual LANs (VLANs)
- VLAN Trunking Protocol (VTP)
- IEEE 802.1q Trunking Protocol
- IEEE 802.1d Spanning Tree Protocol
- Simple Network Management Protocol (SNMP v1, v2 and v3)
- Internet Group Multicast Protocol (IGMPv3) snooping
- Remote management via internal web server
- Cisco Discovery Protocol (CDP)

700-5.4.13 Call Input Test Panel.

A call input test panel shall be installed at the uppermost position of the signal control cabinet rack, above the controller, facing the front. The panel shall include 12 tactile push button switches with ¼ inch minimum diameter head, one for each vehicle and pedestrian input phase. The panel shall be labeled to indicate the phase and function of each button. The push buttons shall be wired to the appropriate output terminals on the back of the input files, actuating the primary vehicle and pedestrian call inputs for each phase. An in-line Molex connector shall be installed in the cabinet wiring harness within 12 inches of the panel

to allow removal without cutting conductors.

700-5.8.2.2 Sensor Units. *DELETE in its entirety and SUBSTITUTE with the following:*

Detectors and Isolators: Inductive loop detectors shall be Model 222, two channel units. DC isolators shall be Model 242, two channel units. AC isolators shall be Model 252, two channel units. Detectors and isolators shall be from a manufacturer approved on the most recent SQPL under the respective sections or as amended by the Irvine Traffic Signal QPL.

700-6 IRVINE TRAFFIC SIGNAL QUALIFIED PRODUCTS LIST (Revised April 2012)

700-6.1 General. Specific models listed on this Qualified Products List (QPL) are approved by the Agency. Equivalency submittals for substitute products shall require submittal of specifications and/or samples, as deemed necessary by the Agency, to determine interchangeability, interoperability, and/or compatibility with existing hardware and equipment. Submittals shall be required before use or installation of any material not specifically listed or defined in the Special Provisions. Materials not specifically listed in the Irvine Traffic Signal QPL or Special Provisions by make and/or model shall comply with the characteristics defined in the Special Provisions or referenced base specifications.

Equipment equivalency submittals shall be coordinated with the City of Irvine Signal Operations and Maintenance lab**.** Such submittals will be reviewed for actual equivalency within 30 days of receipt and approved or declined by the City Engineer. Submittal for equivalency shall not guarantee acceptance. Only accepted equipment, as specified herein, shall be allowable for field installation. Approval of equivalency shall be conveyed to the submitter through the Agency representative in a written memo from the City Engineer modifying the specifications herein.

700-6.2 Reference Specifications. Except as modified herein and on the Plans, Specifications, and Special Provisions all components shall conform, where applicable, to the following:

(a) State of California Department of Transportation, Qualified Products Lists (SQPL)

(b) State of California Department of Transportation, Transportation Electrical Equipment Specifications (TEES)

(c) The CA MUTCD

700-6.3 Pre-Qualified Materials and Equipment. Materials and equipment listed in Table 209-6(A) have been pre-qualified for use in the City of Irvine. Where no specific make is specified, or to determine the standards for equivalency, refer to the Irvine Technical Provisions specified in the reference column.

Table 209-6(A) Pre-Qualified Materials and Equipment

Material Type	Make	Model	Reference
Standards and Arms:			700-3.3
Conduit:			700-3.5
Pull Boxes:			700-3.7
#5 Box	Oldcastle/Christy	N30 Electrical Box	
	BES	C30 Electrical Box	
#5 Lid	Oldcastle/Christy	FL 30T	
	BES	PL30T	
#6 Box	Oldcastle/Christy	N36 Electrical Box	
	BES	C36 Electrical Box	
#6 Lid	Oldcastle/Christy	FL36T	
	BES	PL36T	
B40/C40 Box	Oldcastle/Christy	B40 Electrical Box	
	BES	C40 Electrical Box	
B40/C40 Lid	Oldcastle/Christy	SYN2436T	
	BES	PL40T	
Electrical Service for ATMS 332L Cabinet:			700-3.10
	Myers Power Products	B.M. No. 518636E	
Electrical Service for Type-P Cabinet:			700-3.10
Left Utility Entrance	Myers Power Products	B.M. No. 518606E	
Right Utility Entrance	Myers Power Products	B.M. No. 518642E	

Material Type	Make	Model	Reference
Side Mount BBS Cabinet			700-3.10.2
	Myers Power Products	B.M. No. 527341	
Communications/CCTV Cabinet			700-3.10.2.4
	Myers Power Products	B.M. No. 5051595 Irvine	
Battery Backup System:			700-3.10.2
	Myers	MP2000E	
Luminaires:			700-4.4
Conductors and Wiring:			700-5.3
Interconnect Cable:			700-5.3.3
60-Fiber Hybrid	Corning	060XU4-CPO013D20	
12-Fiber SMF	Corning	012EU4-64701D20	
Traffic Signal Cabinet Assembly:			700-5.4
	SQPL Approved	332L (With Irvine Modifications)	
Controller Unit and Firmware:			700-5.4.6
2070L(N)	Econolite ASC/3	Latest Version	
ASC/3	Econolite	Latest Version	
Input Files and Detector Units: SQPL			700-5.4.7
Output Files: SQPL			700-5.4.8
Load Switch Pack			700-5.4.8
	PDC	SSS-86-3	
Signal Monitor Unit:			700-5.4.10

Material Type	Make	Model	Reference
	EDI	2010ECLip	
Fiber Optic Splice Canister:			701-17.5.5.2
Splice Canister	Corning	SCF-6C22-01	
Splice Tray		SCF-ST-099	
Fiber Optic Interconnect Unit for Type 332L:			700-5.4.11
Term Housing	Corning	CCH-02U	
MM Coupler Panel		CCH-CP12-15T	
SM Coupler Panel		CCH-CP12-19T	
Fan-Out Kit		FAN-BT25-06	
MM ST Connector		95-000-51	
SM ST Connector		95-200-52	
Fiber Optic Interconnect Unit for Type P:			700-5.4.11
Term Housing	Corning	WCH-04P	
MM Coupler Panel		CCH-CP12-15T	
SM Coupler Panel		CCH-CP12-19T	
Fan-Out Kit		FAN-BT25-06	
MM ST Connector		95-000-51	
SM ST Connector		95-200-52	
Communication Data Network:			700-5.4.12
Ethernet Switch	Cisco	IE-3000-8TC	
FX Port Module		IEM-3000-8FM=	
Power Supply		PWR-IE3000-AC=	
Rack Mount		STK-RACKMNT-2955	

Material Type	Make	Model	Reference
Vehicle and Pedestrian Signal Faces:			700-5.5
12”Red Ball	GE Lumination	DR6-RTFB-17A	
	Dialight	433-1210-003XL	
	Leotek	TSL-12R-LX-IL6-A1	
12”Amber Ball	GE Lumination	DR6-YTFB-17A-YX	
	Dialight	433-3230-901XL	
	Leotek	TSL-12Y-LX-IL6-A1	
12”Green Ball	GE Lumination	DR6-GTFB-17A	
	Dialight	433-2220-001XL	
	Leotek	TSL-12G-LX-IL6-A1	
12”Red Arrow	GE Lumination	DR6-RTAAN-17A	
	Dialight	432-1314-001XOD	
	Leotek	TSL-12RA-IL6-A1	
12” Amber Arrow	GE Lumination	DR6-YTAAN-17A-YX	
	Dialight	431-3334-901XOD	
	Leotek	TSL-12YA-IL6-A1	
12” Green Arrow	GE Lumination	DR6-GTAAN-17A	
	Dialight	432-2324-001XOD	
	Leotek	TSL-12GA-IL6-A1	
PED Module	GE Lumination	PS7-CFF1-26A	
	Dialight	430-6479-001X	
	Leotek	TSL-PED-16-CIL-9	

Material Type	Make	Model	Reference
Detection Systems:			700-5.8
Video Detection Processor	Iteris	Vantage Edge 2 with Smart Cycle	
Video Detection Camera	Iteris	RZ-4 Advanced Wide Dynamic Range Camera	
Video Detection Communication Module	Iteris	Edge Connect	
Video Detection Extension Module	Iteris	Extension Module	
Push Buttons:			700-5.9
Accessible Pedestrian Station	Polara	Navigator 4-Wire	
Closed Circuit Television (CCTV) System:			700-5.10.1
Camera System:	Axis	Q6045-E	
Arm	Axis	T91A67 T91A61	
Arm	Pelco	IWM24-GY	
Pole Adapter	Pelco	PA402	
MPEG Encoder	Optelecom-nkf	Siqura C-60 E-MC/SA	
Power Supply	Optelecom-nkf	PSA-UN12DC with Ferrules	
Alternate Power Supply	FRIWO	1811971	
Internally Illuminated Street Name Signs (IISNS):			700-5.11
Sign and Enclosure	NuArt		

Material Type	Make	Model	Reference
	McCain		
	National		
LED Light Engine	Illumecon	1072FGF for 6' 1096FGF for 8'	
Emergency Vehicle Preempt (EVP) System:			700-5.12
Phase Selector	GTT Opticom	764	
2ch, 2 way	GTT Opticom	722	
2ch, 1 way	GTT Opticom	721	
1ch, 1 way	GTT Opticom	711	
Lighted Crosswalk System:			700-5.13
	Silicon Constellations		

SECTION 701 – CONSTRUCTION

701-1 GENERAL. *ADD the following:*

4 The State Standard Specifications and State Standard Plans

5 The CA MUTCD

ADD:
701.1.1 Equipment List and Drawings. *ADD the following:*

Agency approved models are listed on the Irvine Traffic Signal Qualified Products List (QPL).

701-4 DAMAGE TO EXISTING OR MODIFIED SYSTEMS.
Add the following subsection:

701-4.1.1 Traffic Detection and Communication. The existing detection and communication systems shall be maintained at all times during construction. In the event of damage by the Contractor or any of his subcontractors as determined by the City Representative, the Contractor shall commence repairs immediately. The Contractor shall replace and restore to operation any damaged detector (inductive loop or other) within 24 hours after damage occurs. Repairs to damaged signal interconnect cable (SIC) shall be completed within 10 working days. The City shall have the option to complete necessary repairs and charge the responsible Contractor for any associated repair costs, pursuant to

Sec. 6-3-317 of the City Municipal Code.

701-12 CONDUIT
REVISE as follows:

701-12.1 General. *7th paragraph, DELETE the 1st and 2nd sentences and SUBSTITUTE with the following:*

Conduit types and sizes for each application shall be as specified in 700-3.5 "Conduit" of the Standard Specifications and these Special Provisions.

Contractor shall refer to the Alton Parkway Regional TSS Project (Project P) design plans for new conduit installation locations.

701-12.2 Rigid Metallic Conduit. *DELETE in its entirety.*

701-12.3 Galvanized Pipe. *DELETE in its entirety.*

701-13 WIRES, CONDUCTORS AND CABLES
REVISE as follows:

701-13.1 General. 5th paragraph, DELETE the 1st sentence and SUBSTITUTE with the following:

Each multi-conductor cable shall be labeled in each pull box and at the signal cabinet per the State Standard Specifications Section 86-2.08D, indicating the signal standard to which it is connected.

701-13.2 Splices. 1st paragraph, DELETE the 3rd sentence and SUBSTITUTE with the following:

Each multi-conductor cable shall be continuous from the signal cabinet to the terminal block on the signal standard it services. No splicing of multi-conductor cable shall be permitted.

701-14 SERVICES
REVISE as follows:

701-14.3 Service in Vaults. After the last paragraph ADD the following:

The copper service feed wires from the service pull box to the electrical service shall have an Agency furnished tag at both ends identifying them as "City of Irvine Service Conductors" to power company officials.

701-16 STREET LIGHTING CONSTRUCTION.

701-16.1 General. *ADD the following text*

Material for conduits, pull boxes, light poles and other appurtenances necessary for installation of street lights shall comply with the requirements of Southern California

Edison (SCE) and specifications in Section 103 and Section 104.

The Contractor shall be responsible for furnishing and installing all ducts, pull boxes, substructures and trench work necessary for installation of the street lights.

Southern California Edison will furnish and install the street lights, power cable, set the poles & bases, and activate the street lights. The Contractor shall coordinate his work with SCE.

The work area shall be cleared and rough graded to within 4" (inches) of final grade prior to installation of Edison conduit or structures. Contractor is to verify location and widths of all sidewalks and driveways prior to street light installation.

All substructures shall be constructed or installed to Edison specifications.

The Contractor shall provide supervision over and coordination among the various Contractors working within the work area to prevent damage to Edison facilities. Contractor is responsible for the cost of repairs, replacement, relocation, or other corrections to Edison facilities made necessary by his failure to provide supervision or to otherwise comply with these Special Provisions.

Inspection is required during the construction period. A 48 hour advance notice of intent to start construction is required from the Contractor to the Southern California Edison Company. Standards of Edison construction requirements are available upon request.

701-16.7 Luminaires.

701-16.7.1 Lamp Size and Identification. *ADD the following text*

The luminaire optical assembly shall be sealed, watertight, and filtered to prevent contamination from infiltration of gaseous and particulate matter. The lamp socket shall be factory present to produce a medium cutoff IES Type III light distribution. The optical assembly door hinge shall be designed to prevent the door from swinging free of the hinge pins when opened.

701-16.7.2 Photoelectric Units. *ADD the following text*

Photoelectric control shall be installed in accordance with Section 103 and Section 104.

701-16.7.3 Measurement.

STREET LIGHT MODIFICATIONS shall be made at the price indicated in the **Lump Sum (LS)** price bid for **STREET LIGHTING**. Payment shall be full compensation for all items necessary to accomplish the work and all work appurtenant thereto.

701-16.7.4 Payment.

Payment for **STREET LIGHTING** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, Southern California Edison coordination, existing foundation removal, hauling and disposal; installation of

street lighting facilities, including, excavation, conduit, pull rope and pull box installation; connection to electrical utilities, excavation and backfill of conduit trenches, as-builts, record drawings, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **TEMPORARY STREET LIGHTING** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, Southern California Edison coordination, existing foundation removal, hauling and disposal; installation of temporary street lighting facilities, including, excavation, conduit, pull rope and pull box installation; connection to electrical utilities, excavation and backfill of conduit trenches, and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the City Traffic Engineer and no additional compensation will be allowed therefor.

701-17 TRAFFIC SIGNAL CONSTRUCTION.

701-17.2 Controllers. *ADD the following text*

The controller assembly shall be an Irvine ATMS 332L in conformance with the provisions in Section 104.

The new controller assembly shall include the following:

a) 2070L controller
b) Detection and isolation subsystem
c) Load control subsystem
d) Power distribution subsystem
e) Signal monitor unit
f) Fiber Interconnect Unit (FUI)
g) Communications data network
h) Retractable document storage tray below the controller
i) Call input test panel
j) Removable manual control pushbutton with coiled cable
k) Front and rear door florescent lighting (hooded and downward reflectorized)
l) Video input processors
m) Remote communication module
n) A rack mount LCD monitor drawer
o) The surge protection and isolation assembly

The Contractor shall arrange to have a representative of the City and a qualified field engineer employed by the controller manufacturer or his representative to work on the controller, present at the time the equipment is turned on. The field engineer shall turn- on the equipment. The City representative shall be notified at least 2 working days prior to the turn on.

No traffic signal turn-ons shall occur on Fridays or the day preceding a holiday.

701-17.3 Conduit. *REPLACE entire subsection with following text:*

Conduit work shall conform to the provisions in subsection 701-12 of the Standard Specifications, the State Standard Specifications Section 86-2.05, "Conduit," and these Special Provisions:

- Traffic signal conduits located beneath roadway shall be installed at a minimum depth of 42-inches below finished surface or 6-inches below the structural section, whichever is deeper, but no more than 66-inches. Traffic signal conduits located behind curb and gutter shall be installed at a minimum depth of 30-inches below top of curb.

- All new intersections shall include separate conduits for Signal Interconnect Cable (SIC) and signal wiring (including DLC). Sharing of the DLC and CCTV wiring in the same conduits with SIC is allowed on intersection modifications where conduit fill is less than 40%.

- All interconnect conduits shall contain a No. 10 green insulated solid copper trace wire. All other conduits shall contain a bare, No. 8 solid copper bonding wire, which shall be soldered and crimped in each pull box per the State Standard Specifications Section 86-2.09D, and connected to the ground bar in the traffic signal cabinet.

- Conduit fill shall not exceed the NEC maximum of 40% for conduits with three or more conductors.

- The ends of all conduits shall have Carlon, or approved equal bell fittings with conduit sealing compound to prevent dirt and rock from entering conduit.

- All empty conduits for future conductors shall contain "mule tape" pull rope per the State Standard Specifications Section 86-2.05C.

- All “Pot-holing” within the street to determine subsurface utility locations shall be back-filled and patched to the specifications on Irvine Standard Plan No. 223, “Utility Trench Repair.”

ADD:
701-17.3.1 Pull Box Covers. *REPLACE entire subsection with following:*

Traffic signal pull box covers shall be marked “TRAFFIC SIGNAL”, except electrical service pull box covers, which shall be marked “EDISON”. All markings shall conform to the State Standard Specifications Section 86-2.06B, “Cover Markings.”

Contractor shall refer to the Alton Parkway Regional TSS Project (Project P) design plans for pull box installations and adjustments.

701-17.4 Wiring, Conductors, and Cables
REVISE as follows:

701-17.4.1 General. *After the last paragraph, ADD the following*

Whenever conductors or cables are installed or replaced in a conduit, the ends of the conduit shall have sealing compound applied to inhibit dirt and rock intrusion.

701-17.4.2 Conductor Splicing and Termination. *After the last paragraph, ADD the following*

Splicing and termination of traffic signal conductors shall be pursuant to the State Standard Specifications Section 86-2.09D, “Splicing and Terminations.” Line item E of the State Standard Specifications Section 86-2.09D shall not apply.

All individual conductors shall be labeled in the cabinet per NEMA numeric format. Conductor insulation colors and wire sizes shall be in accordance with the State Standard Specifications Section 86.2.08A, “Conductor Identifications,” except as required herein.

The conditions of this subsection shall apply for all new traffic signal installations and modifications where entire signal conductor legs are re-pulled.

New traffic signal field conductors shall be multi-conductor signal cable and individual wires as specified herein and in accordance with the State Standard Specifications Sections 86-2.08D, “Signal Cable,” and 86-2.08B, “Multiple Circuit Conductors.”

New traffic signal field conductors used for phase indications and buttons shall be State standard 12CSC, 5CSC, and 3CSC multi-conductor signal cable. IMSA cable shall not be utilized. Each signal cable shall be continuous from the signal cabinet to the terminal block on the signal standard it services. No splicing of signal cable shall be permitted. The signal cables shall be labeled in each pull box, per the State Standard Specifications Section 86-2.08D, and at the signal cabinet, indicating the signal standard to which it is connected.

Primary and secondary signal standards shall receive one 12CSC cable for vehicle and pedestrian indications and one 3CSC cable for each button circuit. An additional 5CSC cable shall be provided for each additional vehicle phase serviced by the pole. All 12 CSC cable conductors shall terminate on the terminal block. The 3CSC cables shall service the buttons directly. The 12CSC conductor utilization shall be in accordance with the State Standard Specifications Section 86-2.08D, with the black conductors reserved as spares. The 3CSC conductor utilization shall be: blue/black stripe for pedestrian buttons, blue/orange stripe for bike buttons, and white/black stripe for common.

Pedestrian signal standards shall receive one 5CSC and one 3CSC cable. The 5CSC cable shall service the pedestrian indication and the 3CSC cable shall service button circuits.

Conductors and cables shall be as defined in the State Standard Specifications Section 700-5.3, “Conductors and Cable.” Conductors for internally illuminated street name sign (IISNS) and Safety Lighting circuits may be spliced to branch the circuits as they progress around the intersection.

When either new conductors are added or existing conductors are removed from existing conduits, all existing conductors shall be removed per the State Standard Specifications Section 86-2.09B, “Installation.” The conduit shall be cleaned as provided in the State Standard Specifications Section 86-2.05C, “Installation.” Both old and new

conductors, as shown on the Plans, shall be pulled into the conduit as a unit, unless otherwise approved by the City Engineer.

701-17.4.4 Interconnect.
REVISE as follows:

701-17.4.5 Fiber Optic Cable
REVISE as follows:

701-17.4.5.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

All Signal Interconnect Cable (SIC) installations shall include fiber optic cables as defined in subsection 700-5.3.4, "Fiber Optic Cable," of these Special Provisions, and a solid No. 10 green insulated copper trace wire.

ADD:

701-17.4.5.3 Installation.
Signal Interconnect Cable (SIC) shall be continuous and unspliced between cabinets. SIC Pull Boxes: SIC conduit shall be installed in pull boxes using 45-degree, UL approved elbows. These elbows shall be placed as far apart in the pull box as possible, oriented in the direction of the cable, and offset to one side to facilitate cable pulling and coiling (City of Irvine Traffic Signal Standards Plan 16). Approximately 10- feet of SIC shall be coiled inside of each pull box.

Slack and Termination: A minimum of 50 feet of SIC slack shall be coiled and stored in the communications electrical boxes (B40 box or No. 6 pull box) adjacent to the cabinet foundations at each end of a run. SIC shall be terminated in the traffic signal cabinet and splice canister in the B40 Box per the City of Irvine Traffic Signal Standards Plans TS-10A and TS-10B. When re-terminating existing SIC, sufficient cable slack shall be pulled from adjacent pull boxes to allow for terminations. If necessary, the slack will be obtained from as many pull boxes in the run required to re- terminate the cable to specifications.

Cleaning: Prior to any termination or splicing of fiber optic cables, buffer tubes, fibers, etc. shall be cleaned with an acceptable industry cleaning agent to remove any gel or flooding materials used in the cable structure. Cabinet and surrounding area shall be cleaned of any debris and or gel flooding once termination procedure is completed.

Installation and Testing: Fiber optic SIC shall be installed, spliced, terminated, and tested in accordance with NECA/FOA 301-2009 standards. These standards are available for purchase from the National Electrical Contractors Association Web site at: http://www.necanet.org/store/products/index.cfm/NECA%20301%20(R-09). This includes pre-installation and post installation testing of the cable.

a) Pre-installation testing shall be performed on all fibers using an Optical Time-Domain Reflectometer (OTDR) to confirm no existing damage to the existing cable. The Contractor shall perform such testing on-site prior to completing termination in the communication cabinet.

b) Post-installation testing of all terminated fibers shall be performed using launch cables at both ends as specified in NECA/FOA 301-2009 Annex B.3.

The Contractor shall perform such testing on-site after all termination and splicing work is completed.

Test results: Test results, in the form of pre-installation test data and post-installation OTDR traces, shall be provided to the Agency Representative in a bound hard copy format along with the electronic file and appropriate viewing software, for review and approval after installation and splicing/termination work are completed. The pre-installation test results shall be in the form of a spreadsheet detailing the length and loss/kft for each fiber as well as the parameters used for testing. The post-installation OTDR traces shall clearly show each continuous fiber, the connectors on each end, and the loss for each event. An Agency representative shall approve the test results before final acceptance.

701-17.5 Signal Heads. *ADD the following text*

Vehicle signal faces, signal heads and auxiliary equipment, as shown on the Plans, and the installation thereof, shall conform to the provisions in Section 104.

All signal heads and framework shall be metal and powder coated green/black.

Back plates shall be 5-inch aluminum, louvered, powder coated and secured with stainless steel screws and fender washers cut to fit.

All LED units shall be furnished by the Contractor.

Prior to turn-on, all vehicle signal heads shall be covered with a manufactured cover for that purpose, per the requirements of Section 6-2.2, “Traffic Signal Indications”, Work Area Traffic Control Handbook (WATCH), 2012 Tenth Edition. The covers shall become the property of the City following turn-on.

701-17.6 Detectors.

701-17.6.3 Inductive Loop Detectors. *REPLACE entire subsection with the following text:*

All traffic signal detector loop materials shall be furnished and related work performed in conformance with Section 86 "Signals, Lighting and Electrical Systems" of the State of California Standard Specifications and State Standard Plans, 2015 edition, except as modified in these Specifications or on the Plans and City of Irvine Standards and Design Manual, Section 104.

A full video detection system shall be installed in accordance with the contract plans, City of Irvine section 104 and these Special Provisions. Video detection of vehicles shall be used on all approaches at the intersection stop bar area with bicycle detection at the intersection approach areas.

Loop detection shall be used for the advance vehicular detection on University Drive. Loop detector lead-in cables shall be Type B. Loop detector configuration shall be Type E. Detector curb terminations shall be Type A.

Residue resulting from slot cutting operations shall be removed from the pavement surface.

Obtain approval for exact loop location prior to final placement. Perform preliminary striping layout prior to loop detector layout. Loop detectors shall be 6 foot diameter round loops with 10 foot spacing between adjacent loops in the same lane, except as noted on the Plans. Center loops in the traveled portion of the lane except as shown on the Plans.

Add the following to the last paragraph in Section 86-5.01A (4), "Installation Details," of the State Standard Specifications to read:

"4. The sealant shall be at least 7/8 inch thick above the top conductor in the slot. Final placement of sealant shall be smooth and flush with the adjacent pavement."

In lieu of the epoxy sealant or elastomeric sealant specified in said Section 86-5.01A(5), an asphaltic emulsion sealant conforming to State Specification 8030-41A-15 may be used for filling slots in asphalt concrete pavement. Such material shall not be used in slots, which exceed 5/8-inch in width or where the slope causes the material to run from the slot. The material shall not be thinned in excess of the manufacturer's recommendations and shall not be placed when the air temperature is less than 45 degrees Fahrenheit. Any sealant outside of the slots shall be removed in such a manner as to leave a clean, finished appearance.

Each vehicle detector loop shall lead to separate detector channels. Each detector sensor unit shall be capable of providing vehicle detection and count data.

Detector curb terminations shall be Type A and shall be installed at the locations shown on the Plans.

Final traffic loop detectors shall be installed below the AC Leveling course and in any case shall not exceed six (6) inches in depth below the finished surface.

701-17.7 Pedestrian Signals.

701-17.7.1 General. *ADD the following text*

Pedestrian signals shall conform to the provisions in Section 104.

Pedestrian signals shall be powder coated green Type "A" with international symbols of man and hand with countdown display. All international pedestrian walk/don't walk symbols shall be LED.

Prior to turn-on, all pedestrian signal heads shall be covered with a manufactured cover for that purpose, per the requirements of Section 6-2.3, "Pedestrian Signal Indications", Work Area Traffic Control Handbook (WATCH), 2012 Tenth Edition. The covers shall become the property of the City following turn-on.

701-17.7.2 Pedestrian Push Buttons. *ADD the following text*

Both pedestrian push buttons (PPB) and bicycle push buttons (BPB) shall conform to the provisions in Section 104.

ADD the following subsections:
701-17.8 Closed Circuit Television (CCTC) System.

701-17.8.1 *Approved Location.*

All new traffic signal installations on any roadway shall include, as part of the standard safety systems, the installation of CCTV camera equipment, MPEG CCTV transmission equipment, and any additional wiring or hardware required to support an operational CCTV system. This requirement shall apply unless otherwise specified by the City Traffic Engineer. The approved location for new CCTV camera installations at traffic signals shall be the primary pole farthest from the traffic signal controller cabinet corner, unless otherwise specified by the City Engineer or the Plans and Specifications.

The approved location for new CCTV camera installations at roundabouts or traffic circles shall be located on a Type 15TS pole and be on the outer perimeter of the roundabout or traffic circle, unless otherwise specified by the City Engineer or the Plans and Specifications. The following equipment shall be required for the installation:

Traffic System Cabinet: ATMS 332L. Per Paragraph 209-3.10.

Electrical Service for ATMS 332L Cabinet: Modified State Standard Type II. Meyers Power Product or Pacific Utility Products. Per paragraph 209.310.

Fiber Optic Interconnect Unit: Corning Terminal Housing CCH-02U, Splice Housing (CSH-03U), Splice Tray (M67-068). Per Irvine Traffic Signal Qualified Product List page 26-27. Paragraph 209-5.4.11.

Closed Circuit Television (CCTV) System: Per Irvine Traffic Signal Qualified Product List page 28. Paragraph 209-5.10.

Electrical Conduits: Per paragraph 209-3.5.4.

Pull Boxes: Per paragraph 209-3.7.

701-17.9 Emergency Vehicle Preemption (EVP) System.

701-17.9.1 General.

The EVP shall be installed in accordance with the provisions in Section 104.

701-18 TESTING.

701-18.1 General. *ADD the following text*

Inspection and testing shall conform to the provisions in Section 86-2.14C, "Functional Testing," of the State Standard Specifications and these Special Provisions. During the test period, the City shall maintain the system or systems. The cost of any maintenance shall be at the Contractor's expense, including damage by public traffic, but excluding electrical energy. The cost of maintenance will be deducted from any monies due, or to become due the Contractor.

The 6th paragraph in Section 86-2.14C, "Functional Testing," of the State Standard Specifications is amended to read:

"Shutdown caused by damage by public traffic shall constitute discontinuity of the functional test. Power interruption shall not constitute discontinuity of the functional test."

All reference to State testing facilities or laboratories shall be interpreted as the City designated testing facility. However, State Testing procedures referred to shall remain in effect. All costs for testing of equipment shall be included in the contract lump sum price bid for traffic signal installation.

The Contractor shall provide for shop testing of the fully assembled controller prior to field installation. The cabinet and controller shall be shop tested by a City designated testing facility.

Upon finalization of testing, Contractor shall submit to the City Engineer certification of final acceptance for approval.
The Contractor shall provide in his bid, funds to provide "field test" service by a qualified field engineer to be provided by the equipment supplier. A minimum of four (4) hours of on-site testing shall be provided exclusive of required travel time. A representative from the City shall be present during all testing procedures.

701-21 MEASUREMENT AND PAYMENT. *ADD the following subsection*

Measurement and Payment for **TRAFFIC SIGNAL AT (UNIVERSITY/CALIFORNIA, UNIVERSITY/CAMPUS, UNIVERSITY/MACARTHUR BLVD NORTH RAMPS, UNIVERSITY/MESA)** shall be made at their respective contract **Lump Sum (LS)** prices bid per location as shown the Plans and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, including but not limited to, shop drawings and submittals development, sawcutting, potholing of utilities to determine clearances, traffic plate installation, installation of new traffic signal appurtenants and controller and service, controller and service cabinets, signal poles and foundations, signal heads and equipment, safety lighting system, conduit, conductors, pull boxes, CCTV system, EVP system, video detection system, advance loop detection, Southern California Edison scheduling and coordination, utility and pull box modifications and adjustments, drilling, trenching, excavation, shoring, backfill, compaction and restoration of jacking pits, sidewalk panel and AC replacement, cable installation, system connections, splices, and termination, removals, haul away and disposal of spoils as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **TRAFFIC SIGNAL INTERCONNECT** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to sawcutting, potholing of utilities to determine clearances, traffic plate installation, installation of the new traffic signal interconnect system by jacking, drilling, trenching, excavation, shoring, backfill, compaction and restoration of jacking pits, jacking of new traffic signal interconnect conduits, installation of pull boxes, sidewalk panel and AC replacement, fiber optic cable installation, system connections, splices, and termination, removals, haul away and disposal of spoils, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **TEMPORARY TRAFFIC SIGNAL** shall be made at the contract **Lump Sum (LS)** price bid and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, including but not limited to, shop drawings and submittals development, sawcutting, potholing of utilities to determine clearances, traffic plate installation, installation of temporary traffic signal appurtenants, controller and service cabinets, temporary signal poles and foundations, signal heads and equipment, safety lighting system, conduit, conductors, pull boxes, EVP system, video detection system~~,~~ Southern California Edison scheduling and coordination, utility and pull box modifications and adjustments, drilling, trenching, excavation, shoring, backfill, compaction and restoration of jacking pits, sidewalk panel and AC replacement, cable installation, including overhead wiring, system connections, splices, and termination, removals, haul away and disposal of spoils as specified in the Standard Specifications and these Special Provisions, as approved by the City Traffic Engineer and no additional compensation will be allowed therefor.

All utilities crossing proposed conduit installations or obstructions shall be potholed and plated if necessary until the jacking installation is complete, to ensure adequate clearances. Any other method of conduit installation proposed by the Contractor shall be approved by the Engineer and no additional compensation will be allowed therefor.

PART 8 – LANDSCAPE AND IRRIGATION

SECTION 800 - MATERIALS

800-1 LANDSCAPE MATERIALS.

800-1.0 General.

ADD:

All landscape materials not modified by these Special Provisions shall be as specified by The City of Irvine Landscape Manual And Standard Plans located on the internet at the following addresses: **Landscape Standard Plans** (http://www.cityofirvine.org/cityhall/pw/deveng/standards_manuals/landscape_standard_plans.asp)

Landscape Manual Sections V though XI

(http://www.cityofirvine.org/cityhall/pw/deveng/standards_manuals/landscape_manual.asp)

The Contractor is required to be familiar with the City Landscaping Standards.

800.1.0.1 General notes

General Site

1.1 The contractor shall take all precautionary measures necessary to protect existing improvements from damage. All improvements and structures damaged by the contractor's operations shall be repaired or reconstructed to the satisfaction of the owner's representative, at the expense of the contractor.

1.2 Discrepancies between the plans and site conditions within the limits of work are to be brought to the attention of the owner's representative prior to commencing construction.

1.3 The contractor shall verify all quantities and is responsible for installing all improvements as shown on the drawings, regardless of discrepancies with written quantities.

1.4 All work shall conform to local city, county, and community standards unless noted otherwise.

1.5 Verify location of all vaults, electrical duct banks, manholes, conduit, piping, drainage structures and other utilities.

1.6 Take all dimensions from back of curb, wall, or building, or the centerline of columns or trees unless otherwise noted. All dimensions called out as 'equal' are equal distance measurements to designated centerlines(s).

1.7 Take all dimensions perpendicular to any reference line, work line, face of building, face of wall or centerline.

1.8 Verify location of all buildings, walls, roads, and curbs affecting the landscape scope of work.

Finish Grades

2.1 Finish grade refers to top of mulched surfaces.

2.2 Match grades, layout and elevation of adjoining landscape work by others. Notify the landscape architect of conflicts before proceeding with construction.

2.3 Two (2) working days prior to the start of construction, the contractor shall contact: Underground service alert 811. They, in turn, will contact all of the appropriate utilities, services, and public works agencies in that area.

2.4 Landscape contractor shall be responsible for locating and noting any underground utility lines prior to grading, trenching, and planting or other related site work. Restoration of utilities damaged by contractor shall be made at the contractor's expense to the satisfaction of the owner.

2.5 All finished grades shall provide for natural runoff of water without low sports or pockets. Set flow lines accurately and provides a minimum of 1% gradient unless otherwise noted; refer to civil engineer's drawings for grading information.

2.6 Hold finished grades for shrubs and ground cover areas 1" below top of adjacent pavement, or curbs, unless otherwise noted on the drawings.

2.7 Gradually round off tops and toes of all planted slopes to produce a smooth yet architectural transition between relatively level areas and slopes.

2.8 All landscape grades and spot elevations are based upon grades indicated on latest civil engineer's drawings.

2.9 Conflicts or discrepancies with grades shall be brought to the attention of the landscape architect and civil engineer immediately and prior to proceeding with work.

Planting Notes

3.1 The planting plan is diagrammatic. Plant locations are approximate. Plant symbols take precedence over plant quantities specified. Notify the City's representative of discrepancies prior to starting work.

3.2 Any plant quantities given in the legend are approximate and for the convenience of the owner only.

3.3 Landscape contractor shall perform a percolation check for all tree planting pits, which appear to have a potential drainage problem. The tree planting pits shall be filled with water and rechecked after a 24-hour period. If there is no significant change in the water level. It is the responsibility of the landscape contractor to provide for adequate drainage prior to planting. The contractor shall notify the landscape architect immediately upon completion of the percolation tests in order to discuss appropriate drainage solutions.

3.4 The Landscape contractor shall repair existing landscape areas which are damaged during the construction phase. All damaged material shall be replaced with matching material of similar size, quantity, and caliper.

3.5 Prior to planting. Construction adjacent to planting areas shall be complete and irrigation systems installed and operational.

3.6 Plant material in or near paving or walls may require installation prior to construction. Coordinate this work through the general contractor.

3.7 Refer to Section 800-1.1 for soils preparation and backfill mix.

3.8 Keep shrubs and ground covers a minimum of 24" back from paving and curbs unless specifically noted otherwise on the planting legend.

3.9 Contractor shall apply a 2” minimum thick layer of organic mulch in all planting beds (below all shrubs & groundcover & open spaces) as indicated on the plan. Slopes greater than 3:1 shall not receive mulch.

3.10 Unless stated differently on the plan, planting areas should receive ground cover treatment up to the plant rootball. No bare soil areas shall be left exposed except directly above rootballs.

3.11 Unless specifically called out on the drawings, install parking lot trees in planting areas at stall lines where trees will not interfere with parked cars.

3.12 Install tree trunk protectors for all trees planted within turf areas. Use arbor guard or approved equal.

3.13 All landscape work shall conform to the community standards and the city/county & water district standards unless noted here or otherwise on Plans or Specifications.

3.14 For turf area soil preparation, refer to the planting specifications and Section 212-1.1.

3.15 Plant trees a minimum of 3’ (or as indicated on plan) from back of parking curbs to allow for car overhang. Allow 10’ from fire hydrants, water, and sewer lines. For a min. 10’ setback from light poles, trees (trunk location) shall be no closer unless specifically called out on the drawings, than 5’-0” from a sidewalk or wall follow closely the tree locations as shown on the landscape plan. Paint location of trees in the landscape area and receive approval from the City’s representative prior to digging holes.

3.16 Five (5) weeks prior to deliver to site, submit photos of nursery stock trees, shrubs and groundcovers to landscape architect for review.

3.17 Two (2) weeks prior to plant material delivery to the site, all plant material is to be approved by the AGENCY and secured by the contractor. (a longer period is recommended). Notify the AGENCY if problems occur with inadequately sized plant material to discuss additional nurseries and/or plant substitutions.

3.18 Landscape contractor shall review existing site soil conditions and review geotechnical conditions.

800-1.1 Topsoil.

800-1.1.1 General. *After the last paragraph, ADD the following:*

The Contractor is required to have soil testing by Wallace Laboratory, or approved equal, for Soils Recommendations and apply amendments after demolition.

Agronomic Soils Report

a. After completion of rough grading and prior to soil preparation, the Contractor shall provide the testing of planting soils and composted organic humus materials by an independent agronomic soils testing laboratory that is a member of the California Association of Agricultural Labs. Representative soil samples shall be taken in the field and a written report shall be prepared by the soil scientist that shall include recommendations for soil amendments, preplant fertilization, hydromulch slurry, and post-maintenance fertilization program.
b. Soil preparation specifications shall be prepared based on the test results and recommendations and must be approved by the Engineer and City Landscape Supervisor prior to soil preparation.
c. Soil tests shall be performed after soil preparation to confirm that soil preparation

was performed in compliance with preplant soils report and specifications. Compliance of Contractor's work with soil preparation specifications shall be determined solely by the City.

800-1.2.3 Commercial Fertilizer. *DELETE entire section and SUBSTITUTE following:*

Commercial fertilizer shall be free-flowing material delivered in unopened sacks. Material which becomes caked or otherwise damaged shall not be used. Exact composition and type of fertilizer to be determined by the agronomic soils test and will be supplied by the Contractor at no additional cost to the City. Organic/JTM Complete is the City's preferred fertilizer.

Plant tablets shall be TriC Organics, or approved equal, 17-9-5 applied at the following rates:

Tablet Size	**1.7 Gram**					
Container Size	1 Gallon	2 Gallon	5 Gallon	15 Gallon	24" Box	Tuffy Plugs
Application Rates (No. of Tablets)	2	4	8	16	22	1

800-1.2.4 Organic Soil Amendment.

Organic humic compost must contain a minimum of 20% humic acid and shall be free of wood products. JTM Activator Calcium shall be added to acheive an application rate of 40 lbs./1,000 s.f.

Import topsoil shall not be delivered to the site prior to City approval. The City may request additional testing of imported topsoil at the site to determine conformance to the approved report. Rejected topsoil shall be removed at no cost to the City.

Topsoil

a. Soil to be used as a planting medium shall be fertile, well-drained, of uniform quality, and free of stones over 1-inch diameter, sticks, oils, chemicals, plaster, concrete, or other deleterious materials.
b. Imported topsoil shall be from sources approved by the City Inspector which meet the standards specified above.
c. The Contractor shall provide for the testing of proposed topsoil by a certified agronomic soils testing laboratory and shall submit soils analysis, recommendations and topsoil sample to the City Inspector for approval.
d. If stockpiling is requested, locations and amounts of stockpile shall be approved by the City Inspector.

800-1.2.5 Mulch. *DELETE entire section and SUBSTITUTE following:*

Contractor shall install 2" thick layer of mulch in all planter areas (unless noted

otherwise on Plans). Install mulch per City of Irvine Standard Plans 601, 604, and 606. Mulch to be installed after the planting of trees and shrubs.

The Contractor shall maintain a 6" clear "no-mulch" zone around the base of each new and existing shrub and tree.

Mulch to be "Forest Floor" (0-2"), or approved equal:

A. Available from: Tierra Verde Industries, 7982 Irvine Boulevard, Irvine, CA 92618. Phone: 714-786-9558.

B. Product shall be woodchips ½" to 3" in length, meet Caltrans Standard Specifications Section 20-2.08 for Mulch, contain only toxic free mineral based colorant, and contain reused **City of Irvine Green Waste**.

C. The Contractor shall submit one sample of mulch materials for City approval.

D. the Engineer has the right to reject all samples and request additional samples until a suitable mulch material is approved.

800-1.4 Plants.

800-1.4.1 General. *DELETE entire section and SUBSTITUTE following:*

Shrubs and ground covers shall be grown by an established nursery having been in the business of growing shrubs and ground covers a minimum of five (5) years. At the option of the Engineer, plants shall be inspected and tagged at the nursery prior to shipment to the planting site. Shrubs shall be of the specified type and size, selected from high quality, well-shaped nursery stock. Plant names indicated or listed in the "Plant Legend" on the Plans, conform to the approved names given in "An Annotated Checklist of Woody Ornamental Plants in California, Oregon, and Washington, Manual 4091", published by the University of California (1979), and in accordance with American Nurseryman standards. Except for names not covered therein, the established custom of the nursery shall be followed. Condition of plants shall be in accordance with the California State Department of Agriculture's regulations for nursery inspections, rules, and grading and shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant disease, insect pests, or their eggs, and shall have healthy normal root systems, well filling their containers, but not to the point of being root bound.

Plants shall not be pruned prior to delivery, except as authorized by the City. The size of the plants shall correspond with that normally expected for species and variety of commercially available nursery stock, or as specified on the Plans. The minimum acceptable size of all plants, measured before pruning with the branches in normal position, shall conform to the measurements, if any, specified on the Plans. Plants larger in size than specified may be used with the approval of the City, but the use of larger plants shall not serve as the basis for a change order. All plant material shall be subject to the inspection and acceptance of the City before planting. A representative number of plants as determined by the City may be inspected for size and condition of root growth, insects, injuries and defects. Plants not accepted are to be removed from

the site immediately and replaced with suitable plants. The City reserves the right to reject entire lots of plants represented by defective samples. The contractor shall provide a plant material order invoice to the Engineer at the pre-construction meeting. The Contractor shall provide one-year warranty on all trees.

800-1.6 Miscellaneous Landscape Materials.

800-1.6.1 General. *ADD the following Subsection:*

Whenever a material or process is delineated or specified by patent, proprietary name or process, or manufacturer's name, such specifications are used for the purpose of facilitating the description of material or process desired. Approved equals are acceptable as approved by the engineer. Suppliers and manufacturer's directions, specifications and recommendations will be followed in all cases where the materials used furnish directions and cover points not delineated on the Plans or in the Specifications. The specifications only indicate the quality and workmanship to be performed rather than a detailed description of the performance of the work. In the event of any discrepancies between the Plans or Specifications, the final decision as to which will be followed shall be made by the Engineer, the installation shall be rectified by the Contractor at no additional cost to the City.

All workmanship and materials incorporated shall be the best available grade of their respective kind. Provide a sample of each material specified. Accepted samples may be used in the Work. Submit three (3) sets of a type written list of materials as specified to the Engineer within twenty-one (21) days after award of contract. This list shall give the name, material number, and the manufacturer, and shall be accompanied by cut sheets or reproductions of catalog pages for all of the material to be installed. Approval of substitutions will not relieve the Contractor from complying with the requirements of the Contract Documents, Plans and Specifications. Pay at Contractor's sole expense for all changes caused by approved substitution which affect other items of work.

800-1.6.2 Herbicide.

Organic herbicide for weed abatement shall be Suppress EC, or approved equal.

800-1.6.3 Pre-emergent.

Pre-emergent weed control material shall be organic.

800-2 IRRIGATION SYSTEM MATERIALS. *ADD the following Subsections:*

All materials supplied for this project shall be new and free from any defects. All defective materials shall be replaced immediately at no additional cost to City.

After award of contract and before any irrigation system materials are delivered to the job site, submit to the Engineer a complete list of all irrigation systems, materials, or processes proposed to be furnished and installed as part of this Contract. Show manufacturer's name and catalog number for each item, furnish complete catalog cuts and technical data, furnish the manufacturer's recommendations as to the method of installation. No substitutions will be allowed without prior written acceptance by the

Engineer. Manufacturer's warranties shall not relieve the Contractor of liability under the guarantee. Such warranties shall only supplement the guarantee. If the Contractor of liability under the guarantee. Such warranties shall only supplement the guarantee. If the Contractor wishes to substitute any equipment or materials for equipment or materials listed on the irrigation Drawings and Specifications, it may do so by providing the following information to the Engineer for approval:

- Provide a written statement indicating the reason for making the substitution.
- Provide catalog cut sheets, technical data, and performance information for each substitute item.
- Provide in writing the difference in installed price if the item is accepted.

800-2.0.1 General Irvine Ranch Water District Water Facilities Requirements.

1. All water and sewer work shall conform to IRWD standards and these Special Provisions.
2. Removal of existing irrigation water meter, backflow preventer and lines serviced removal from service of existing mains, appurtenances, irrigation water meter, backflow preventer and lines serviced from the IRWD Domestic Water Distribution system shall be coordinated with Ives Sosa at Irvine Ranch Water District.
3. General: Existing mains and appurtenances shall be removed from service at the locations shown on the Plans or as directed by the district representative.
4. Method of abandonment: Existing pipe and appurtenances shall be filled with one-sack sand cement slurry, or removed from the ground, in which case all backfill and repair of surface shall be in accordance with section 02223, trenching, backfilling, and compacting. Where connections or stub-outs are abandoned, all valves shall be removed and the remaining flanged fitting shall be closed / plugged using a blind-flange fitting.
5. Storage of removed material: Removed pipe and appurtenances may be temporarily stockpiled on the job in a location that will not disrupt traffic or be a safety hazard, or it may be delivered to the district yard as directed by the district representative.
6. Maintenance of service: prior to performing any work to replace existing pipes and/or services, the contractor shall make proper provisions for the maintenance and continuation of service as directed by the district representative.
7. Abandoned water services: For a water service to be considered abandoned all surface fittings, meter, meter box and customer service valve shall be removed. The device line and corporation stop shall be removed and the service saddle plugged with a brass plug if there is no corporation stop on the service, the adapter shall be removed and a brass plug installed in the service saddle with special permission of the district representative, the horizontal portions of the service line may be abandoned in place by cutting and crimping the ends closed.
8. Abandoned sewer laterals: Sewer laterals to be removed from service shall be cut and plugged at the main.
9. Abandoned sewer manholes: For server manholes to be abandoned, the manhole cover, ring, grade rings and manhole cone shall be removed and properly disposed of all portions of the manhole to be abandoned shall be removed to a point eight (8) feet below finished ground surface. The

remaining portions of the manhole shall be filled with one-sack sand cement slurry.

10. Abandoned meter vaults, PRV vaults and other structures and boxes: For meter vaults, PRV vaults and other structures to be abandoned, the top hatch or covers, cover slab or hatch or box grade ring, grade rings and other structural elements shall be removed and properly disposed of all portions of the vault or structure to be abandoned shall be removed to a point eight (8) feet below finished ground surface. The remaining portions of the manhole shall be filled with one-sack sand cement slurry.

800-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings. *ADD the following before the first paragraph:*

General: Use only new materials of brands and types noted on drawings, specified herein, or approved equals.

Handling of PVC Pipe and Fittings: The Contractors cautioned to exercise care in handling, loading, unloading, and storing of PVC pipe and fittings. All PVC pipe is to lie flat so as not to subject it to undue bending or concentrated external load at any point. Any Section of pipe that has been dented or damaged will be discarded and, if installed, shall be replaced with new piping. Pipe and fittings shall not be stored in direct sunlight.

DELETE 2ND Paragraph in its entirety and SUBSTITUTE with the following:

All pressure supply lines downstream irrigation water meter shall be PVC Class 315 for sizes 2" and larger and PVC Schedule 40 for sizes 1-1/2" and smaller with solvent welded joints. Piping shall conform to ASTM 1785. All non-pressure lines downstream of the remote control valve shall be Schedule 40 solvent weld PVC conforming to ASTM D1785. Pipe shall be marked continuously with manufacturer's name, nominal pipe size, schedule or class, PVC type and grade, National Sanitation Foundation approval, Commercial Standards designation, and date of extrusion. All plastic pipes shall be extruded of an improved PVC virgin pipe compound in accordance with ASTM D2241 or ASTM D1785.

All solvent weld PVC fittings shall be standard weight Schedule 40 and shall be injection molded of an improved virgin PVC fitting compound. Slip PVC fittings shall be the "deep socket" bracketed type. Threaded plastic fittings shall be injection molded. All tees and ells shall be side gated.

All fitting shall conform to ASTM D2466. All threaded nipples shall be standard weight Schedule 80 with molded threads and shall conform to ASTM D1785.

All solvent cementing of plastic pipe and fittings shall be a two-step process, using primer and solvent cement applied per the manufacturer's recommendations. Cement shall be of a fluid consistency, not gel-like or ropy. Solvent cementing shall be in conformance with ASTM D2564 and ASTM D2855. When connection is plastic to metal, female adapters shall be hand tightened, plus one turn with a strap wrench. Joint compound shall be non-lead base Teflon paste, tape, or approved equal.

800-2.1.4 In-Line Drip Irrigation System:

1. Drip tubing shall be of nominal sized one-half inch low density, ultra-violet-resistant, linear polyethylene tubing with internal pressure-compensating, self cleaning, integral drippers at a specified interval. The tubing shall be brown in color for recycled water systems and shall conform to an outside diameter (O.D.) of 0.66" and an inside (I.D.) diameter of 0.57". The low volume tubing shall be capable of a discharge rate of 0.90 gallons per hour (GPH) between operating pressures of 7 to 70 psi for each individual dripper. Dripper tubing shall be manufactured by Netafim or approved equal.
2. The individual self-cleaning, pressure-compensating drippers shall be welded to the inside of the tubing wall. The drippers are constructed of three individual pieces:
    a. Black-colored dripper containing a filtration system on the inlet side, compensation cell, and recessed chamber with a water outlet.
    b. Hard plastic diaphragm retainer (colored red (0.61) or black (0.92) depending on the discharge rate), with chamfered edges and a recessed groove in the center the full length of the diaphragm.
    c. Flexible black rubber diaphragm that allows excessive pressure to build up within the chamber to purge sediment or other debris that may not have been captured by the disc filter.
3. Dripper spacing shall be 12" on center.
4. All insert barbed fittings shall be constructed of molded, ultra-violet-resistant, brown colored plastic with purple stripe for recycled water having a nominal inside dimension (I.D.) of 0.57" (17 mm). Each fitting shall have a minimum of two ridges or barbs per outlet. All fittings shall be Netafim or approved equal and shall be available in one of the following end configuration:
    a. barbed insert fittings.
    b. male pipe threads (MPT) with barbed insert fittings or female pipe threads (FPT) with barbed insert fittings.
5. Non-pressure supply and exhaust headers shall be rigid, un-plasticized polyvinyl chloride PVC Schedule 40 with schedule 40 PVC fittings conforming to Section 212-2.13 of these specifications. Size as noted on drawing.
6. The line flushing valve shall be constructed of brown molded plastic and shall be a normally open hydraulic valve which flushes based on volumetric quantities of water. Inlet and outlet configurations shall be 1/2" MPT.
7. The line flushing valve shall be serviceable by removing a threaded cover from a base, exposing the internal components. The internal components of the line flushing valve shall consist of a molded diaphragm retainer, a high density plastic flush regulator, and a diaphragm 2" in diameter. The line flushing valve shall be capable of automatically operating during initial system pressure build-up to discharge approximately one gallon of water per 15 gpm demand at 50 psi maximum, or 1.5 psi minimum inlet pressure as manufactured by Netafim or approved equal.
8. Pressure regulation valve shall be a spring-operated piston type with an externally accessible regulation unit that can be serviced without removing the valve from the

system. The valve shall be constructed from molded black plastic with six different colored tops with interchangeable springs denoting different pressure regulation and flow ranges. The regulator shall have a built-in indicator that shows when the proper outlet pressure is reached. Operating ranges for the valves shall be from 15 to 50 psi in 5 psi increments. Inlet and outlet ports of the valve shall be a combination of male/female threads as manufactured by Netafim or approved equal.

9. Basket filter shall be Rain Bird PRB-QKCHK-100 pressure regulating basket filter with 200 mesh screen.
10. Air/vacuum relief valves shall be constructed of gray plastic with an internal sliding poppet valve that is capable of venting air or vacuum to the atmosphere only. The main body shall have a 1/2" male pipe thread (MPT). Operating pressure range for the air/vacuum relief valve shall be 7 psi minimum to 140 psi maximum as manufactured by Netafim or approved equal.
11. Tubing clamps shall be constructed to 304 AISI stainless steel and shall be one "ear" type. This "ear" shall be capable of being pinched with a pinching tool to secure the tubing around the insert barbed fitting. Interior clamp wall shall be smooth to prevent crimping or pinching of tubing. Wall thickness of clamps shall be .0236" (0.6 mm) with an overall band width of 1/4" (7 mm).

800-2.2.4 Remote Control Valves.

Electric control valves shall be of the manufacturer, size, and type indicated on the Plans. Electric control valves shall be electrically operated.

Identification Tag:

1. I.D. tags for remote control valve and master valves shall be manufactured from Polyurethane Behr Desopan. Use Christy's standard tag hot-stamped with black letters on yellow background. Tags shall be numbered to match programming shown on the Drawings. Provide one tag for each remote control valve and master valves.
2. Special order tags from T. Christy Enterprises, 655 E. Ball Road, Anaheim, CA 92805. Phone (714) 507-3300 and Fax (714) 507-3310.

800-2.2.7 Valve Boxes. *DELETE in its entirety and SUBSTITUTE following:*

All valve boxes shall be green in color. Green lids with purple tags will be allowed. Contractor shall special order green valve box lids to conform to IRWD requirements and shall include the words "RECYCLED WATER – DO NOT DRINK" and shall have the international symbol conveying the same warning.

Valve boxes shall be fabricated from a durable, weather-resistant plastic material resistant to sunlight and chemical action of soils. The valve box cover shall be green in color and secured with dual locks to be supplied. The cover and box shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box. Electric control valve boxes shall be 16"x11"x12" rectangular size. Valve box covers shall be marked "RCV" with the valve identification number "heat branded" onto the cover in 2-inch high letters / numbers. Gate and quick

coupler valve boxes shall be 10” circular size. Valve box covers shall be marked with either “GV” or “QCV” heat branded” onto the cover in 2-inch high letters. Heat branding method, craftsmanship, and lettering orientation to be approved by city prior to branding lids.

800-2.4 Irrigation Equipment.

Irrigation heads and nozzles shall be of the manufacturer, size, type, with radius of throw, operating pressure, and discharge rate indicated on the Plans. Irrigation heads and nozzles shall be used as indicated on the Plans.

Irrigation in-line dripper lines, filters, pressure regulators, and drip line stakes shall be of the manufacturer, size, type, with operating pressure, and discharge rate indicated on the Plans and Section 212-2.1.6 of these specifications.

800-3 ELECTRICAL MATERIALS.

800-3.2.2 Conductors.

Remote control wire shall be direct-burial AWG-UF type, size as indicated on the Plans, and in no case smaller than 14 gauge. Connections shall be Scotchlok 3M DBY Direct Bury Splice Kit per City if Irvine Standard Plan 516. Kit shall include a Scotchlok Y Spring connector, a Polypropylene tube prefilled with waterproof sealing gel. Ground wires shall be white in color. Control wires shall be red (where two or more controllers are used, the control wires shall be a different color for each controller. These colors shall be noted on the “Record Drawings” Plans located on controller door). The Contractor shall provide 4 spare control wires per City Landscape Manual Section 5,B,24,C.

800-3.3 Controller Unit. *ADD the following paragraphs:*

1. Each automatic irrigation controller shall be included as a component part of the specified vandal-resistant irrigation controller enclosure assembly. Refer to irrigation drawings for size and type of enclosure.

2. Automatic controller(s) shall be of size and type shown on the Drawings.

3. Final location of automatic controller(s) shall be approved by the City's Authorized Representative.

4. Refer to electrical section of the specifications for 120 volt power hook up of irrigation controller. The final electrical hook-up of automatic controller shall be the responsibility of the Contractor.

5. The existing electrical meter pedestal and conduit to controller locations shall be protected in place.

Stainless Steel Vandal-Resistant Irrigation Controller Assembly with Companion Box:

1. The vandal-resistant irrigation controller enclosure assembly shall be installed on concrete base per irrigation details shown on the drawings.
2. The automatic controller stainless steel backboard assembly shall include a pre-wired terminal strip clearly indicating the proper points of connection of all appropriate wiring (station valves, master valve, common, central control.)
3. The combination vandal-resistant electrical meter pedestal and companion irrigation controller enclosure assembly shall be assembled by Imperial Technical Services, 1485 Manessero, Anaheim, CA 92807, phone (714) 792-2926 or approved equal.
4. Upon final inspection of the project, the Irrigation Contractor shall provide for the Owner a "Job Site Equipment Inspection and 5 year Warranty Certification" letter from the enclosure manufacturer. This letter shall include verification of conformance with specifications and installation recommendations, site inspection date and shall list all assemblies covered under the 5 year warranty.

Flow Meter:

1. An irrigation main-line flow sensor shall be installed in accord with Drawings and manufacturer's installation instructions. See Drawings for location. Contractor shall be responsible for the installation, hook-ups, materials, components, connections, etc., of the flow sensors for the complete automatic operation of the system.
2. The flow sensor shall be manufactured by Data Industrial. Install flow sensor as recommended by the manufacturer and as detailed on the drawings. Use FM series plastic tee mounted flow sensor for sizes 1" through 4" as noted on the drawings.
3. The flow sensor wire from flow meter to automatic controller shall be one (1) black and one (1) red standard U.F. #14 AWG irrigation control wire.
4. Flow sensor wire may be extended to a maximum distance of 2000 ft. from the location of the assembly to which it is connected. Wire shall be installed in a 1-1/2 in. UL-listed Schedule 40 conduit gray in color.
5. Provide a separate flow sensor wire from flow sensor to its respective designated controller as detailed on the drawings. Run flow sensor wires within 1-1/2" PVC Schedule 40 conduit.
6. Control and common wires for the master valve immediately upstream from flow sensor shall be installed within flow sensor conduit along with flow sensor wire.
7. Flow sensor wires from different points of connection may not be installed within the same conduit.
8. Control and common wires for the automatic master valve immediately upstream from flow sensor shall be installed with wire colors other than red and black.
9. All splices shall be performed in a 3M "DBY" direct bury splice kit. Make only one splice with each connector.

Flow Sensor Wire Conduit:

1. As a part of this Contract, the Contractor shall provide and install a flow sensor cable and flow sensor cable conduit as shown on the drawings. Flow sensor cable conduit shall be PVC Schedule 40 with solvent welded joints and unless otherwise noted on the Drawings, shall be 1-1/2" in size, with 1/4" nylon pull rope installed within entire length of conduit. Flow sensor cable conduit shall be gray in color.
2. Except as noted in paragraph number two (above) of this section, all requirements for flow sensor cable conduit and fittings shall be the same as for solvent-weld pressure main line pipe and fittings as set forth in Section 800-2.1.3 of these Specifications.
3. Sweep ells shall be fabricated standard electrical type PVC schedule 40 long sweep elbows. Cap sweep ell with tri-plug with the ring for securing nylon pull rope.
4. The flow sensor cable conduit shall be installed where indicated on the Drawings and shall be routed, wherever possible, with the irrigation pressure main line piping. Provide 24" minimum cover over all flow sensor cable conduits. Provide 6" minimum separation between communication cable conduit and irrigation pressure main line piping.
5. Pull boxes shall be located a minimum of two hundred (200) feet on center, at each automatic controller location, and at each change of direction. Use 11-3/4” x 17" x 11" rectangular box for all pull boxes, Carson Industries #1419-12B with green bolt-down cover or approved equal. Cover shall be marked "Irrigation Control Cable." Refer to the Drawings for additional information.

SECTION 801 – INSTALLATION

801-1 General. *After last paragraph, ADD the following:*

All landscape and irrigation installation items not modified by these Special Provisions shall be as specified by The City of Irvine Landscape Manual and Standard Plans located on the internet at the following addresses: **Landscape Standard Plans**

(http://www.cityofirvine.org/cityhall/pw/deveng/standards_manuals/landscape_standard_plans.asp)

And > Landscape Manual Sections V though XI

(http://www.cityofirvine.org/cityhall//pw/deveng/standards_manuals?landscape_manual.asp)

801-2.2.2 Fertilizing and Conditioning Procedures.

The quantities of materials necessary for the planting area shall be at the site and shall be verified by delivery tickets furnished to the Engineer before spreading.

801-2.3 Finish Grading.

All earthwork, planting and sprinkler/irrigation work shall be inspected and accepted by the City prior to start of any work of Section 801.

308-4 PLANTING.

308-4.1 General.

Prior to excavation for planting or placing of stakes, locate all utilities, electric cables, conduits, irrigation lines, heads, valves and valve control wires, and all utility lines so that proper precautions may be taken not to damage such improvements. In the event of a conflict between utilities and plant locations, promptly notify the Engineer. If contractor fails to follow this procedure it shall repair all damages resulting from the work at contractor's sole expense. Plant materials shall be furnished in the quantities and /or spacing as shown or noted for each location, and shall be of the species, kinds, sizes, etc., as symbolized, and described in the Plant Legend, as indicated on the Plans. Verify all sizes and quantities on the Plans. Promptly report any discrepancy to the Engineer.

Any plant material or any development materials specified by trade name or equal, shall be according to these Plans and Specifications. Installation and use of substitute items shall not be made until the Contractor is in receipt of written approval from the Engineer. Substitution proposals for plant material must be accompanied by written proof of non-availability within a 100 hundred mile radius of the project site for material originally specified and proof that material was ordered in a timely manner upon award of contract.

Regularly water all nursery stock in containers and place them in a cool area protected from sun and drying winds. Do not allow plants to dry out before or while being planted. Keep exposed roots moist by means of wet sawdust, peat moss or burlap at all times during planting operations. Do not expose roots to the air except while being placed in the ground. Wilted or diseased plants, whether in place or not, will not be accepted and shall be replaced at the Contractor's sole expense. Moisten prepared surface immediately prior to installing plant material. Install plant material immediately after delivery to site, within 24 hours after delivering to prevent deterioration. Hand water landscaped areas immediately after installation with a minimum of 1" of water.

801-4.5 Tree and Shrub Planting. *Delete 4th paragraph and SUBSTITUTE with the following:*

In the event that underground construction work or obstructions are encountered in the planting operation, alternate locations for plant material will be selected by the City. Operation shall be done at no extra cost to the City. For amendments to backfill material as necessary per Soils Recommendations and apply amendments as specified per soil report to be done by Wallace laboratory.

No mixing for individual planting holes is permitted. Mix planting soil prior to backfilling and stockpile at the site. Iron sulfate shall not contact cement.

Remove all plants from their containers and set so that, when settled, they bear the

same relation to the required grade as they bore to the natural grade before being transplanted. Set plant tablets to be used with each plant on the top of the root ball so the required number of tablets to be used in each hole can be easily verified. Bury tablets upon approval by the Engineer. Planting holes shall be compacted with no more than 1" settlement from finished grade. Improper planting will delay the start of the maintenance period.

801-4.8.5 Mulch.

All trees, shrubs and ground cover areas shall be mulched after planting to a depth of 2 inches. Maintain a 6-inch clear "no-mulch" zone around the base of each tree and shrub.

308-5 IRRIGATION SYSTEM INSTALLATION.

801-5.1 General.

Prior to all work of this section, contractor shall inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations. In the event of discrepancy, immediately notify the Engineer. Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved. Before starting work, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade.

The Contractor shall request acceptance of final grades before work on this Section can begin. Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Coordinate the installation of all irrigation materials with all other work. All scaled dimensions are approximate. Check and verify all size dimensions prior to proceeding with work under this Section. Exercise extreme care in excavating and working near existing utilities. Repair damages to utilities, which are caused by Contractor's operations or neglect, at no additional cost to City. Prior to installation, stake out all pressure supply lines, routing and location of sprinkler heads, valves, backflow preventer, and automatic controller (unless existing is to be utilized). Layout irrigation system and make minor adjustments required due to differences between site and Drawings. Where piping is shown on Drawings under paved areas, but running parallel and adjacent to planted areas, install the piping in the planted areas. Connections to, or the installation of, the water supply shall be at the locations shown on the Drawings. Minor changes caused by actual site conditions shall be made at no additional expense to the City.

Verify and be familiar with the locations, size and detail of points of connection provided as the source of water and connection to the irrigation system. Irrigation design is based on the available static water pressure shown on the Drawings. Verify static water on the project prior to the start of construction. Should a discrepancy exist, notify the Engineer prior to beginning construction. Prior to cutting into the soil, locate all cables, conduits, sewer septic tanks, and other utilities as are commonly encountered underground and it shall take proper precautions not to damage or disturb such improvements. If a conflict exists between the obstacles and the proposed work,

promptly notify the Engineer who will arrange for relocations. Proceed in the same manner if a rock layer or any other such conditions are encountered. Protect all existing utilities and features to remain on and adjacent to the project site during construction. Repair, at its sole cost, all damage resulting from its operations or negligence.

Permit the Engineer to visit and inspect at all times any part of the work and shall provide safe access for such visits. Where the Specifications require work to be tested by the Contractor, it shall not be covered over until accepted by the Engineer. Notify the Engineer, a minimum of 48 hours in advance of where and when the work is ready for testing. Should any work be covered without testing or acceptance, it shall be, if so ordered, uncovered at the Contractor's sole expense. Inspections will be required for the following at a minimum:

- System layout
- Pressure test irrigation main line (two hours at 150 PSI).
- Coverage test of irrigation system
- Final inspection prior to start of maintenance period
- Final acceptance

Work that fails testing and is not accepted will be re-tested. Hourly rates and expenses of the Engineer for re-inspection or re-testing will be paid by the Contractor at no additional expense to City.

Use all means necessary to protect irrigation system materials before, during, and after installation and to protect the installation work and materials of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the City. Exercise care in handling, loading, unloading, and storing plastic pipe and fittings under cover until ready to install. Transport plastic pipe only on a vehicle with a bed long enough to allow the pipe to lay flat to avoid undue bending and concentrated external load. Dispose of waste, trash, and debris in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Do not bury waste material and debris on the site. Burning of trash and debris will not be permitted. Remove and dispose of rubbish and debris generated by his work and workmen at frequent intervals or when ordered to do so by the Engineer. At the time of completion the entire site will be cleared of tools, equipment, rubbish and debris which shall be disposed of off-site in a disposal area that is fully and legally licensed.

Supply the following items:

- Two(2) wrenches for disassembly and adjustment of each type of sprinkler head used in the irrigation system.
- Two(2) 30-inch sprinkler keys for manual operation of control valves.
- One (1) valve box cover key.
- Four (4) extra sprinkler heads of each size and type.

The above equipment shall be turned over to the Engineer at the final inspection.

At the time of the pre-maintenance period inspection, the Engineer and governing agencies will inspect the work and, if not accepted, prepare a list of items to be completed by the Contractor. At the time of the post-maintenance period or final inspection the work will be re-inspected and final acceptance will be in writing by the

Engineer. The City Engineer shall have final authority on all portions of the work.

801-5.3 Irrigation Pipeline Installation.

801-5.3.1 General.

Excavations shall be straight with vertical sides, even grade, and support pipe continuously on bottom of trench. Trenching excavation shall follow layout indicated on Drawings to the depths below finished grade and as noted. Where lines occur under paved area, these dimensions shall be considered below subgrade. Provide minimum cover of 24 inches on pressure supply lines. Provide minimum cover of 24 inches for control wires. Provide minimum cover of 12 inches for non-pressure lines. Backfill material on all lines shall be the same as adjacent soil free of debris, litter, and rocks over ½ inches in diameter. Backfill shall be tamped in 4-inch layers under the pipe and uniformly on both sides for the full width of the trench and the full length of the pipe. Backfill materials shall be sufficiently damp to permit thorough compaction, free of voids. Backfill shall be compacted to 90% relative compaction and shall conform to adjacent grades. Flooding in lieu of tamping is not allowed. Under no circumstances shall truck wheels be used to compact backfill. Provide sand backfill a minimum of 6 inches over and under all piping under paved areas. Trenching around existing trees and roots shall be done by hand without the use of power tools unless specifically directed by the City.

Piping under existing pavement may be installed by trenching, jacking, or boring. No hydraulic driving is permitted under asphalt pavement. Carefully inspect all pipe and fittings before installation, removing dirt, scale, burrs, and reaming. Install pipe with all markings up for visual inspection and verification.

Remove all dented and damaged pipe sections. All lines shall have a minimum clearance of 6 inches from each other and 12 inches from lines of other trades. Parallel lines shall not be installed directly over each other. In solvent welding, use only the specified primer and solvent cement and make all joints in strict accordance with the manufacturer's recommended methods including wiping all excess solvent from each weld. Allow solvent welds at least 15 minutes setup time before moving or handling and 24 hours curing time before filling. PVC pipe shall be installed in a manner, which will provide for expansion and contraction as recommended by the pipe manufacturer. Centerload all plastic pipe prior to pressure testing. All threaded plastic-to-plastic connections, work the metal connections first. Use a non-hardening pipe dope an all threaded plastic-to-metal connections, except where noted otherwise. All plastic-to-metal connections shall be made with plastic female adapters.

Sub-Surface Drip Irrigation System:

1. Verify existing field dimensions of the area to be irrigated with the irrigation plans for accuracy. Begin dripper tubing layout 12" away from both hard surfaces; i.e., concrete sidewalks, curbs, asphalt, and/or undefined edges; i.e., shovel-cut headers. Mark tubing intervals on the ground with flags, paint, or some other markings that can be maintained throughout the installation.
2. As much as possible, supply and exhaust headers shall be installed perpendicular to contours.

3. As much as possible, dripper tubing shall be installed parallel with contours.
4. Dripper tubing can be installed with the water outlets facing upward or downward. Place dripper outlets in such a manner as to form a triangular pattern between parallel tubing laterals. In irregular areas, some water outlets may end up too close to fixed improvements and may have to be capped off with a dripper plug ring.
5. Connect dripper tubing to barbed fittings by pushing on and over both barbs until the tubing has seated against another piece of tubing or has butted against another portion of the barbed fitting. For water pressures in excess of the 45 psi, use stainless steel clamps as noted in paragraph 8, “Pipe Clamping” on all barbed fittings.
6. When design operating pressure exceeds 45 psi, stainless steel pipe clamps shall be used. Slip clamps over tubing before slipping tubing over insert barbed fitting. Place clamp between the first and second ridge of the barbed fittings and crimp the “ear” of the clamp tightly. Crimp the “ear” twice to ensure proper seating.
7. Install a pressure regulator below grade, downstream, and in line with the remote control valve. Whenever possible, place the pressure regulator in the same valve box to allow for periodic inspection. Place the regulator with the arrow (molded into the side of the body) pointing in the direction of the flow of water. Provide straight piping on the outlet side of regulator for a dimension not less than three lengths of the overall body dimension.
8. Install the basket filter, horizontally level, below grade and before or after the remote control valve as indicated in the installation details. The position of the disc filter in the valve box shall be centered to allow for removal of the filter element for periodic servicing. Refer to the installation details for the size of the valve box.
9. Install the air/vacuum relief valve below grade and at the highest elevation within each zone. Depending on the site conditions and tubing layout, more than one air/vacuum relief valve into a 1/2" x 3/4” SCH 40 PVC reduction bushing and thread this assembly into a 180° 2-way adapter tee with a 3/4” (MPT) outlet. Place the valve within a round valve box with a locking cover and a 1 cu. Ft., 3/4” gravel sump as noted on the details. Additional blank Techline tubing may be necessary when placing Techline dripper tubing on mounds or berms with more than a 3’ elevation difference. Blank Techline tubing shall be connected perpendicular to the dripper tubing with barbed tees from the lowest elevation of dripper tubing to the highest point of the mound berm where the air/vacuum relief valve is located. This air/vacuum relief lateral serves to collect and transport trapped air bubbles or relieve vacuum in lower elevation dripper tubing parallel to the dripper tubing located at the highest point in the system. Locate an air/vacuum relief lateral for each berm within the system.
10. Prior to backfilling and before connection of the line flushing valves, flush the entire system to remove any dirt or sediment that may have entered the system during the installation.
11. Install the line flushing valve horizontally level and below grade at the hydraulic termination point(s) in each system. Locate in a valve box with the dome-

shape of the valve facing upward. Include a minimum of 1 cu. Ft. of 3/4" crushed rock in the bottom of the valve box per construction detail.

12. Prior to backfilling, open the remote control valve and operate each circuit to check for leakage around both barbed and threaded PVC fittings. Make necessary corrections to stop leaks.

Re-test those systems where leaks were corrected before commencing backfilling operations.

Irrigation heads shall be installed as indicated on the Plans. Riser nipples shall be of the same size as the riser opening in the sprinkler body. Install all assemblies specified herein according to the respective detail Plans or Specifications, using best standard practices.

Fertilizer Proportioning System

1. The fertilizer proportioning system shall be a pressurized, non-mechanical system that operates exclusively on the differential pressure created by water flowing past inlet and outlet ports to the system storage tank. It shall require no moving parts to create fertilizer flow from the tank to the irrigation line. Even metering shall be accomplished by creating a layering process inside the tank that separates incoming water from the fertilizer solution without requiring an internal bladder. Water entering the tank shall be directed to both the top of the tank and bottom of the tank to provide even metering and adequate agitation to accommodate the use of either liquid or water soluble non-hazardous fertilizers and supplements. The system shall be connected with flexible tubing and provide for easy disconnection and reconnection for subsequent removal and refill.
2. The proportioning rates shall be adjustable from 400:1 to 15,000:1 and automatically adjust to changes in water pressure and water flow without the use of electronic meters and/or control valves.
3. The system shall be constructed of materials conforming to a minimum of schedule 40 PVC.
4. The proportioner shall be an EZ-FLO Fertilizing System or approved equal.

801.-5.4 Installation of Valve Boxes, and Special Equipment.

Automatic control valves, quick coupler, basket strainer, and gate valves shall be installed in the approximate locations indicated on the Plans. Valves shall be installed in shrub areas whenever possible. Install all valves as indicated on the detail on Plans. Valves to be installed in valve boxes shall be installed one valve per box. Valve boxes shall be installed in shrub areas whenever possible. Quick coupler valves shall be set approximately 6 inches from walks, curbs, header boards, or paved areas where applicable.

801-5.5 Automatic Control System Installation. *ADD the following:*

All Automatic Irrigation valves shall be connected to the new and / or existing irrigation controllers as shown on the Plans. Install control wiring from and between Controllers

to remote control valves as shown on the Plans.

New controller charts and data sheets shall be provided for all irrigations systems.

801-5.6 Sprinkler Coverage Test. *ADD the following:*

Coverage testing shall be performed for overhead irrigation and drip irrigation.

Adjust valves, align heads, and check the coverage of each system prior to coverage test. If it is determined by the Engineer that additional adjustments or nozzle changes will be required to provide proper coverage, make all necessary changes or adjustments prior to any planting. The entire system shall be operating properly before any planting operations commence.

Do not allow or cause any of the work of this section to be covered up or enclosed until it has been observed, tested and accepted by the Engineer. Notify the Engineer a minimum of 48 hours in advance where and when the work is ready for testing. When the sprinkler system is completed, perform a coverage test of each system in its entirety to determine if the water coverage for the planted areas is complete and adequate in the presence of the Engineer.

Irrigation drip line to be installed per Plans and Special Provisions. The contractor shall be responsible for making field adjustments to provide proper drip coverage. Install drip line - on grade per manufacturer's instructions. Immediately after installing drip line, flush system to the satisfaction of the Engineer. Drip line coverage to be observed, tested, and approved by the Engineer prior to burying with top soil. Notify the Engineer a minimum of 48 hours in advance where and when the work is ready for testing.

801-5.7 Operational Test. *ADD the following:*

Furnish all materials and perform all work required to correct any inadequacies of coverage due to deviations from the Plans, or where the system has been willfully installed as indicated on the Drawings when it is obviously inadequate, without bringing this to the attention of the Engineer. This test shall be accepted by the Engineer and accomplished before starting any planting. Final inspection will not commence without record Drawings as prepared by the Contractor. During the maintenance period adjust and maintain the irrigation system in a fully operational condition providing complete irrigation coverage to all intended plantings. Clean-up shall be made as each portion of the work progresses. Refuse and excess dirt shall be removed from this site, all walks and paving shall be broomed, and any Contractor damage shall be repaired to original conditions.

Fertilizing System Installation and Operation

1. Location
    a. The system shall be installed underground, in a valve box in the irrigation main line between the irrigation point of connection and the irrigation control valves for the area or landscape being fertilized and as noted on the irrigation drawings.

2. Installation
    a. Turn off water to the irrigation main line and relieve pressure by opening a sprinkler valve.
    b. Glue an EZ-FLO Coupling Connector or approved equal into the irrigation main line. Note flow direction indicator on the coupling connection and install accordingly.
    c. Connect ¼" black polyethylene tubing to the Blue connector on the coupling and connect the Blue Jaco fitting to the coordinating side of the system cap.
    d. Connect ¼" clear polyethylene tubing to the Green connector on the coupling and connect the Green Jaco fitting to the coordinating side of the system cap.
    e. Install pressure clamps on the green and blued tubing connections on the EZ-FLO Coupling Connector.
    f. Cut both the black and clear connecting lines approximately 3" from the cap connection and install EZ-FLO Shut Off Valves or approved equal with the disconnect washer located between the Shut Off Valve and the connection to the cap. (EZ-FLO "X" models have the shut off valves factory installed to tubing).
    g. Set Shut Off Valves to the off position and turn the main line water on.

3. Operation
    a. Remove the cap by disconnecting at the shut off valves by pulling the washer against the shut off valve while pulling tubing away from Cap of system.
    b. Fill the tank with 3" to 4" of water with either shut off valve.
    c. Fill the system with the recommended amount of EZ-FLO Non Hazardous Premium Fertilizer and Liquid Nutrition Supplement or approved equal directly into the tank.
    d. Fill the tank the rest of the way with water by opening one of the Shut Off Valves and direct the flow into the tank until all air has been exhausted.
    e. Screw the cap to the tank and reconnect the tubing. (be sure to install washer first)
    f. Slowly turn both Shut Off Valves to the on position.

4. Testing
    a. Open one or more sprinkler valves.
    b. Set the system on fast and watch for color in the clear tubing. If color is present, the system is ready for operation.
    c. Set the feed adjustment valve to the desired feed rate.

801-6.1 MAINTENANCE AND PLANT ESTABLISHMENT. *DELETE in entirety and SUBSTITUTE with the following:*

Landscape establishment period shall be a minimum of thirty (30) working days. Landscape maintenance period shall be a minimum of sixty (60) working days after "Date of Acceptance of Installation" of all planting areas. Request in writing from the Engineer notification of the date of the start of the maintenance and planting establishment period. The maintenance period shall not officially begin or end without written notification from the Engineer. Maintain all planted areas on a continuous basis as they are completed during the progress of the work and during the establishment and

maintenance period, and shall continue to maintain them until final acceptance in accordance with the following:

- Water, weed, fertilize, edge, prune, spray as necessary to promote a healthy growing condition. Maintain lawn at a mowing height recommended by the city. All planted areas shall be kept free of debris and weeds. Keep project neat and attractive throughout the maintenance period.
- Apply only organic herbicides for weed control, as needed or directed by City, in accordance with manufacturer's instructions and applicable laws and regulations. Remedy damage resulting from the use of herbicides.
- Adjust the irrigation system to sufficiently saturate root zone without rotting trees, shrubs, and ground cover. Do not exceed Irvine Ranch Water District's (IRWD's) water allocation.
- Fertilize with "JTM Complete 8-2-4" at 10lbs./1,000 s.f. at five (5) calendar days before the end of the maintenance period.

Maintenance period shall be extended if plant material is not in a healthy growing condition. When all maintenance work has been completed to the satisfaction of Engineer, the Engineer will issue to the Contractor a written notice of completion of maintenance.

All inspections herein specified shall be made by the City. Request inspection at least forty-eight (48) hours in advance of the time the inspection is required. Requested inspections, subsequently canceled without twenty-four (24) hours notice, will be billed to the Contractor. Inspection is required for, and not necessarily limited to, the following parts of the work:

- Incorporation of soil amendments and fine grading.
- Prior to digging plant pits for trees and shrubs.
- During backfilling of plant pits with amended backfill.
- Final inspection at the end of the maintenance period.
- Irrigation inspection / coverage test prior to planting.

801-7 GUARANTEE. *Add /Delete / Modify:*

Should any a defect in materials or workmanship be discovered within the guarantee period the Contractor shall correct it within Ten (10) calendar days after receipt of written notice from City (and at no additional expense to City). When the nature of the repairs, as determined by the City, constitute an emergency or threat to public safety the City may proceed to make repairs at the Contractor's expense. Any and all damages to existing improvement shall be repaired to the satisfaction of the owner by the Contractor, all at no additional cost to the City.

Guarantee shall be submitted on Contractors own letterhead as follows:

GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM

We hereby guarantee that the sprinkler irrigation system we have furnished and installed is free from defects in materials and workmanship, and the work has been completed in accordance with the Drawings and Specifications, ordinary

wear and tear and unusual abuse, or neglect excepted. We shall repair or replace any defective material during the period of one year after date of filing of the Notice of Completion and also repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the owner. We shall make such repairs or replacements within 10 calendar days following written notification by the owner. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from owner, we authorize the owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefor upon demand.

801-8 Payment. *DELETE in entirety and SUBSTITUTE with the following:*

Payment will be made at the contract unit prices as set forth in the bid schedule. Protection of existing utilities, potholing, trenching, backfilling, compaction, installation of new irrigation pipes, fittings, sprinklers, valves, wiring, connection to controllers, meters, utility service connections, irrigation system modifications, removal and salvage of specified equipment to City yard, and appurtenances shall be considered included in the contract unit price. Payment shall include full compensation for furnishing all labor, materials, and tools, equipment and all incidentals complete in place as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor. No additional compensation will be allowed for the replacement of broken irrigation heads, either existing or damaged during construction.

Measurement and Payment for **CLEAR AND GRUB (FOR LANDSCAPING AND IRRIGATION IMPROVEMENTS)** shall be made at the contract unit price bid per **Square Foot (SF),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, removal of landscape shrubs, groundcover, turf, debris, at-grade irrigation appurtenances and miscellaneous items not otherwise identified on Civil drawings as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **TREE REMOVAL** shall be made at the contract unit price bid per **Each (EA),** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to removal of trees ,stumps, roots, traffic control and disposal, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor. Trees to be removed are as stipulated in the “University Drive Road Widening Tree Evaluation” Report prepared by Arborgate Consulting dated December 21, 2016.

Measurement and Payment for **SOIL PREPARATION / FINE GRADING** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the

requirements herein, including but not limited to, submittals, testing of planting soils, grading, fertilizer and soil amendment application, irrigation, supervision and all other items necessary within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **EXCAVATION AND REMOVAL OF SPOILS FOR DECOMPOSED GRANITE PAVING** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to removal, disposal and grading for the installation of decomposed granite paving. as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **4" STABILIZED DECOMPOSED GRANITE** shall be made at the contract unit price bid per **Cubic Yard (CY)** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to placing, grading and compacting of material, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL ROTOR HEADS** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; excavation, installation and backfill of spray heads conforming to City Std. Plan #521, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL TREE SUPPLEMENTAL SPRAY HEADS** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; excavation, installation and backfill of spray heads conforming to Detail H / LI-14, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL LANDSCAPE DRIPLINE WITH APPURTENANCES** shall be made at the contract unit price bid per **Square Foot (Square Foot)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to

accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; excavation, installation and backfill of dripline, air relief valves, flush valves; and associated PVC headers / connections, per Details A, B, C & G, / LI-14, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL DRIP REMOTE CONTROL VALVES** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of valves, valve box and valve box marking; water and electrical connections, excavation and backfill of valve box per Detail D / LI-14 and City Std. Plan #516, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL REMOTE CONTROL VALVES** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of valves, valve box and valve box marking; water and electrical connections, excavation and backfill of valve box per City Std. Plan #510 and #516, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **RELOCATE EXISTING REMOTE CONTROL VALVES** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of valves, valve box and valve box marking; water and electrical connections, excavation and backfill of valve box conforming to City Std. Plan #510 and #516, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **RELOCATE EXISTING HOA CONTROLLER** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements here, including but not limited to, notification of HOA management company, removal of existing controller, installation of new standard concrete foundation to match City Std Plan #515, #516 & #517, conduits, control wiring, and 120 VAC service re-location, as shown on the Plans, as specified in

the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **MODIFY MISCELLANEOUS EXISTING UCI IRRIGATION HEADS** shall be made at the contract **Lump Sum (LS)** maximum Time and Material allowance basis and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements here, conforming with City Std. Plan #521, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL QUICK COUPLING VALVES** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of quick coupler, swing joint, stainless steel clamps, rebar stake, valve box, valve box markings, pipe and brick supports, landscape fabric and gravel; water connection, excavation and backfill of valve box conforming to City Std. Plan #508, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL LINE SIZE GATE VALVES** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of valve, valve box, valve box markings, landscape fabric and gravel; water connections, excavation and backfill of valve box conforming to City Std. Plans #506 and #507, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL FLOW SENSOR** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of flow sensor, valve box, valve box markings, landscape fabric and gravel; water connections, excavation and backfill of valve box conforming to City Std. Plan #509 and #516 as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL BASKET STRAINER AND MASTER VALVE ASSEMBLY** shall be made at the contract unit price bid per **Each (EA)** as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place,

conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of basket strainer, installation of master valve, valve box, valve box markings, pipe and concrete block supports, landscape fabric and gravel; water and electrical connections, excavation and backfill of valve box, conforming to City Std. Plan #505 and as modified by Detail F / LI-14 and City Std. #516, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL FERTILIZER INJECTOR** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, fertilizer injector, valve box, valve box markings, pipe and concrete block supports, ball valve, landscape fabric and gravel; water connections, excavation and backfill of valve box, conforming to Detail E / LI-14 as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL IRRIGATION CABINET/CONTROLLER ASSEMBLY (INCLUDES DEMO OF EXISTING CABINET/CONTROLLER)** shall be made at the contract unit price bid per **Each (EA**), as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; removing and salvaging of the existing controller(s) to City yard, existing foundation removal and disposal, re-location and installation of 120VAC power conduit from re-located power meter, furnishing and installing fully functioning cabinet/controller, controller programming, cabinet/foundation modifications, conduit/conductor/control wire installation/modifications, electrical connections and modifications, excavation and backfill of conduit trenches, conforming to City Std. Plan #515, 516 & 517, as-builts, record drawings, guarantees, permits and licenses, testing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REMOVE EXISTING 1 1/2" WATER METER** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals; removing and salvaging of water meter and concrete box (s) to City yard, capping service line per City Std., excavation and backfill of work area, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL NEW 1 1/2" WATER METER** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements

herein, including but not limited to, submittals, water meter, 2” service line and related appurtenances;, excavation and backfill of trenches, conforming to IRWD Std. Plan #W-2, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL SCH 40 PVC NON-PRESSURE LATERAL LINE** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; excavation, installation of pipe, fittings and backfill / compaction, conforming to City Std. Plan #500 and Detail G / LI-14, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL CL 315 PVC PRESSURE MAIN LINE PIPE** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; utilization of existing sleeves, installation of pipe, fittings and pull boxes; installation of anchors, thrust blocks and location wire; connection to connection to water and irrigation equipment, excavation and backfill of trenches, conforming to City Std. Plan #500 as-builts, record drawings, guarantees, permits and licenses, testing, flushing, inspections and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL SCH 40 PVC SLEEVES (4”)** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of sleeves, fittings and excavation and backfill of trenches, conforming to City Std. Plan #501 as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL CONTROL WIRE** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, irrigation materials and related appurtenances; installation of wire, conductors and pull boxes; connection to irrigation equipment, excavation and backfill of trenches, as-builts, record drawings, guarantees, permits and licenses, testing, inspections conforming to City Std. Plans #501 & #501 as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL ROOT BARRIER** shall be made at the contract unit price bid per **Linear Foot (LF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals and related appurtenances; installation of root barrier, excavation and backfill of trenches, guarantees, conforming to City Std. Plan #608 as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL TUFFY™ POTS SHRUBS AND GROUNDCOVER OR APPROVED EQUAL** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, equipment and materials for providing photos and acceptance documents; transporting, delivering, storing, furnishing, and installation of Tuffy™ pots shrubs and groundcovers, soil amendments, clean-up operations and conforming to City Std. Plan #601 within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL 1 GAL. SHRUBS AND GROUNDCOVER** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, equipment and materials for providing photos and acceptance documents; transporting, delivering, storing, furnishing, and installation of 1 gallon shrubs and groundcover, soil amendments, clean-up operations and conforming to City Std. Plan #601 within the limits as shown on the Plans,, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL 5 GAL. SHRUBS** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, equipment and materials for providing photos and acceptance documents; transporting, delivering, storing, furnishing, and installation of 5 gallon shrubs, soil amendments, clean-up operations and conforming to City Std. Plan #601 within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL 15 GAL. SUCCULENT** shall be made at the contract unit price bid per **Each (EA)** and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, equipment and materials for providing photos and acceptance documents; transporting, delivering, storing, furnishing, and installation

of 15 gallon succulents, soil amendments, clean-up operations and conforming to City Std. Plan #601 within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL 24" BOX TREE** shall be made at the contract unit price bid per **Each (EA)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, equipment and materials for providing photos and acceptance documents; transporting, delivering, storing, furnishing, and installation of 24” box trees, soil amendments, clean-up operations and conforming to City Std. Plan #606 within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **SODDED TURF (REPAIR)** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, transporting, delivering, storing, furnishing, and installation of sodded turf, soil amendments and clean-up operations as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **REPLANT DAMAGED HONEYSUCKLE/VINCA/ CARPOBROTUS** shall be made at the contract unit price bid per **Square Foot (SF)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, transporting, delivering, storing, furnishing, and installation of damaged Honeysuckle / Vinca / Carpobrotus groundcovers, soil amendments and clean-up operations as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Measurement and Payment for **INSTALL 2" MULCH BED** shall be made at the contract unit price bid per **Cubic Yard (CY)**, as field measured and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, storage, mulch installation and clean-up operations within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor. Mulch area shall be measured in plan view.

Payment for **PLANT ESTABLISHMENT AND MAINTENANCE (90 WORKING DAYS)** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements

herein, including but not limited to, submittals, fertilizers, irrigation system inspection and operation, plant materials, plant replacement, supervision, and all other items necessary to establish and maintain the landscaping for the entire duration of the Post Installation Maintenance period within the limits as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

Payment for **RELOCATE EXISTING HOA AND CITY METER** shall be made at the contract **Lump Sum (LS)** price bid and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to accomplish the work, complete in place, conforming to the requirements herein, including but not limited to, submittals, water meter, 2” service line repair and related appurtenances;, excavation and backfill of trenches, conforming to IRWD Std. Plan #W-2, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefor.

APPENDIX LIST

The following Appendix are on file with the City of Irvine Public Works Department

APPENDIX A	**Standard Plans**
APPENDIX B	**Permits**
APPENDIX C	**Caltrans Standard Special Provisions for Removal of Yellow Traffic Stripe and Pavement Markings**
APPENDIX D	**IRWD Standard Notes**
APPENDIX E	**IRWD Specifications, Section 1 - General Requirements**
APPENDIX F	**IRWD Specifications, Section 2 – Technical Specifications**
APPENDIX G	**University Drive Road Widening Tree Evaluation Report**
APPENDIX H	**State Board of Equalization Compliance Policy and Procedures Manual**

CITY OF IRVINE

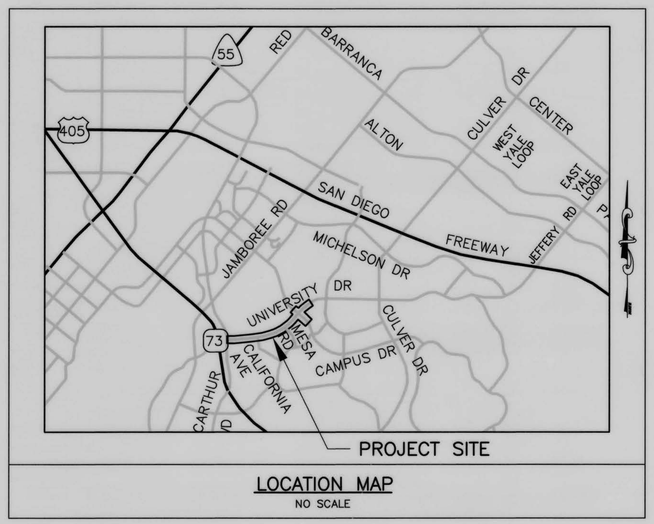
STREET WIDENING IMPROVEMENT

FOR

UNIVERSITY DRIVE

MACARTHUR BLVD TO CAMPUS DRIVE

C.I.P. No. 311306



LOCATION MAP
NO SCALE

BENCH MARKS:

VERTICAL DATUM: ORANGE COUNTY PUBLIC WORKS NAVD-88
BENCH MARK: 3FF-11-99
ELEVATION: 28.710 (YEAR LEVELED: 1999)

BASIS OF BEARINGS:

HORIZONTAL DATUM: NAD-83 (NSRS 2007) EPOCH: 2007.00
PROJECTION: CCS-83 ZONE: 6 UNITS: US SURVEY FEET (US FT)
COMBINED GRID FACTOR: 0.99997359 CALCULATED AT: CP-107 NORTHING 2184163.63 US FT, EASTING 6073576.05 US FT, ELEVATION 26.55 US FT
MAPPING ANGLE: -0-52-52.96 CALCULATED AT: CP-107 NORTHING 2184163.63 US FT, EASTING 6073576.05 US FT

NOTES:

1. DISTANCES INVERSED FROM COORDINATES ARE GRID. TO OBTAIN APPROXIMATE GROUND DISTANCES DIVIDE BY THE COMBINED GRID FACTOR.
2. THE VALUES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) FOR STATIONS USED ARE:

STATION	LATITUDE	LONGITUDE	ΔLAT(1σ)	ΔLONG(1σ)
OEOC	33-45-57.075479	-117-44-38.836680	0.0012m	0.00111m
TRAK	33-37-04.552726	-117-48-12.315528	0.00105m	0.00157m
WHYT	33-40-28.152253	-117-38-36.396318	0.00076m	0.00085m

ABBREVIATIONS

AB	AGGREGATE BASE	PCC	PORTLAND CEMENT CONCRETE
AC	ASPHALT CONCRETE	P/L	PROPERTY LINE
AR	AIR RELEASE	PROP	PROPOSED
ARHM	ASPHALT RUBBER HOT MIX	PVI	POINT OF VERTICAL INTERSECTION
AT&T	AMERICAN TELEPHONE & TELEGRAPH COMPANY	PVMT	PAVEMENT
		RC	RELATIVE COMPACTION
BEG	BEGIN	RCCO	RADIUS CORNER CUT-OFF
BO	BLOW-OFF	RT	RIGHT
C&G	CURB AND GUTTER	R/W, ROW	RIGHT-OF-WAY
CAB	CRUSHED AGGREGATE BASE	S	STATION CONTROL LINE
CB	CATCH BASIN	SCCO	STRAIGHT CORNER CUT-OFF
CPB	COMMUNICATION PULLBOX	SCE	SOUTHERN CALIFORNIA EDISON
CD	CURB DRAIN	SCO	SEWER CLEAN OUT
CF L	CURB FACE	SDMH	STORM DRAIN MANHOLE
CL, C	CENTERLINE	SDWK	SIDEWALK
CMB	CRUSHED MISCELLANEOUS BASE	SL	STREET LIGHT
C.N.	CONSTRUCTION NOTE	SLPB	STREET LIGHT PULL BOX
CONC	CONCRETE	S'LY	SOUTHERLY
CTV, CATV	CABLE TELEVISION	SMH	SEWER MANHOLE
DWY	DRIVEWAY	SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
EA	EACH		
EG	EXISTING GROUND	SS	SANITARY SEWER
E'LY	EASTERLY	SSMH	SANITARY SEWER MANHOLE
EM	ELECTRICAL METER	STA	STATION
EMH	ELECTRICAL MANHOLE/VAULT	STD	STANDARD
EMP	ELECTRICAL METER PEDESTAL	STL	STEEL
EP	EDGE OF PAVEMENT	SW, SDWK	SIDEWALK
EPB	ELECTRICAL PULLBOX	TC	TOP OF CURB
EX, EXIST	EXISTING	TCE	TEMPORARY CONSTRUCTION EASEMENT
FG	FINISHED GROUND	TF	TOP OF FOOTING
FS	FINISHED SURFACE	TPM	TREATED PERMEABLE MATERIAL
G, GAS	GAS	TRANS	TRANSITION
GB	GRADE BREAK	TS	TRAFFIC SIGNAL
GTR	GUTTER	TSC	TRAFFIC SIGNAL CONTROLLER
GV	GAS VALVE	TSP	TRAFFIC SIGNAL POLE
HH	HAND HOLE	TSPB	TRAFFIC SIGNAL PULL BOX
HP	HIGH PRESSURE	TW	TOP OF WALL
ICV	IRRIGATION CONTROL VALVE	TYP	TYPICAL
IRWD	IRVINE RANCH WATER DISTRICT	UCI	UNIVERSITY OF CALIFORNIA, IRVINE
LD	LOCAL DEPRESSION	ULT	ULTIMATE
LOL	LAYOUT LINE	VAR	VARIES
LT	LEFT	W	WATER
MAX	MAXIMUM	WIF	WROUGHT IRON FENCE
MBGR	METAL BEAM GUARD RAIL	W'LY	WESTERLY
NAP	NOT A PART	WM	WATER METER
N'LY	NORTHERLY	WMH	WATER MANHOLE
NTS	NOT TO SCALE	WV	WATER VALVE
PAR	PARABOLIC		

*NOTE:
ALL OTHER ABBREVIATIONS ARE DEFINED IN CALTRANS STANDARD PLANS A10A, A10B AND SECTION 1-3.2 OF THE "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

LEGEND

- CATCH BASIN MANHOLE
- CENTERLINE MONUMENT
- CALTRANS
- EDGE OF PAVEMENT
- ELECTRIC MANHOLE
- ELECTRIC PULLBOX
- EXISTING ELEVATION/DIMENSION
- FIBER OPTIC PULLBOX
- FIRE HYDRANT
- GAS VALVE
- GAS LINE MARKER
- GUARD POST
- IRRIGATION CONTROL VALVE
- IRRIGATION UTILITY FEATURE
- MONUMENT/SURVEY SPIKE AND WASHER
- POWER POLE/STREET LIGHT
- SANITARY SEWER MANHOLE
- SEWER CLEAN OUT
- SIGN
- SIGNAL OVERHANG
- STORM DRAIN MANHOLE
- STREET LIGHT PULLBOX
- TELEPHONE MANHOLE
- TRAFFIC LOOP
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL PULLBOX
- WATER METER
- WATER VALVE
- WATER LINE MARKER
- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- AGGREGATE BASE PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTES (7) (8)
- TYPE II LATEX SLURRY SEAL PER CONSTRUCTION NOTE (23)
- PCC PER CONSTRUCTION NOTE (3) (4) (22) (42)
- ASPHALT CONCRETE OVERLAY PER CONSTRUCTION NOTE (10)
- 24" RW — RECLAIMED WATER (IRWD)
- 12" G — GAS
- 16" S — SEWER
- 12" DW — DOMESTIC WATER
- 60" SD — STORM DRAIN
- CATV — CABLE TV
- E — EDISON
- T — TELEPHONE

811 Know what's below. Call before you dig.

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UNAUTHORIZED CHANGES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED BY THE PREPARER OF THESE PLANS, AND THE ENGINEER-IN-CHARGE.

NOTICE TO CONTRACTOR

PURSUANT TO ASSEMBLY BILL 3019, AND SUBSEQUENT STATE LAW, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING ARE PERFORMED:

1. THE CONTRACTOR AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D. # FROM UNDERGROUND SERVICE ALERT (1-800-422-4133) AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF EXCAVATION.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 EXP. 3-31-16 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2017
DESIGNED BY:	MG/CM	JUL 2017
CHECKED BY:	RGB	JUL 2017
RECOMMENDED BY:		DATE

APPROVED BY:
CITY ENGINEER
JAMES M. HOULIHAN R.C.E. No. 51568 7/26/17 DATE
APPROVED BY: DATE

IRVINE RANCH WATER DISTRICT
APPROVAL OF DOMESTIC WATER AND SEWER FACILITIES.
IRWD CODE 1648 PROJ. NO. 2155 AND 2145.
APPROVED BY: JEFFREY SMYTH 7/13/17 DATE
SUPERVISED BY: MALCOM CORTEZ 7/13/17 DATE
REVIEWED BY: DATE

TITLE SHEET FOR
UNIVERSITY DRIVE & CAMPUS AVE. WIDENING
FROM MACARTHUR BLVD TO CAMPUS DRIVE
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306
PLAN CHECK NO. 00663284-EMC
SHEET T-1
SHT 1 OF 87

UNIVERSITY DR & CAMPUS DRIVE WIDENING CIP 311306

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CALTRANS STANDARDS AND SPECIFICATIONS, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC. (GREENBOOK), THE CITY OF IRVINE STANDARD PLANS, AND AS DIRECTED BY THE ENGINEER.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, VERIFY DEPTH AND PROTECT ALL STRUCTURES, INCLUDING SUBSTRUCTURES, WHETHER SHOWN SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF REPAIRING OR REPLACING ANY OF SAID STRUCTURES DAMAGED BY HIM/HER DURING PROSECUTION OF THE WORK. ALL LOCATIONS SHOWN ON THE PLAN FOR UTILITY LINES HAVE BEEN TAKEN FROM AVAILABLE RECORDS AND THEIR COMPLETENESS OR CORRECTNESS ARE IN NO WAY GUARANTEED.
3. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811, ALL PUBLIC UTILITY COMPANIES, OWNERS OF ALL PRIVATE FACILITIES, AND CALTRANS, UCI, AND IRWD WITHIN AND ADJACENT TO THE AREA OF CONSTRUCTION AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF PERFORMING ANY WORK WITHIN SAID AREA.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY THE PUBLIC WORKS DEPARTMENT BEFORE COMMENCING WORK. TRAFFIC CONTROL WITHIN PUBLIC STREET AND UCI RIGHTS OF WAY SHALL BE IN CONFORMANCE WITH THE STAGE CONSTRUCTION PLANS INCLUDED IN THESE PLANS AND IN CONFORMANCE WITH CALTRANS LATEST STANDARDS AND SPECIFICATIONS, AND LATEST EDITION OF THE WATCH (WORK AREA TRAFFIC CONTROL HANDBOOK).
5. CAUTION: REVIEW APPROVED CONSTRUCTION PLAN. IF CONSTRUCTION REQUIRES WORKERS AND/OR EQUIPMENT TO HAVE PROXIMITY TO OVERHEAD ELECTRIC LINES, CALL SOUTHERN CALIFORNIA EDISON CO. AT (310) 608-5232 FOR APPROPRIATE OFFSETS.
6. PRIOR TO START OF CONSTRUCTION, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED BY A LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA AND SUBMITTED TO THE ENGINEER. THE CONTRACTOR SHALL NOT DESTROY ANY MONUMENTS OR TIES UNTIL HE HAS WRITTEN AUTHORIZATION FROM THE ENGINEER STATING THAT MONUMENTS HAVE BEEN TIED OUT.
7. CONTRACTOR SHALL MAKE AVAILABLE FOR THE INSPECTOR'S REVIEW, ON A DAILY BASIS, AS BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAYS ACTIVITIES.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 3 WORKING DAYS PRIOR TO REMOVING OR RELOCATING ANY TREES WITHIN THE PUBLIC RIGHT OF WAY.
9. ALL TRAFFIC SIGNS TO BE RELOCATED OR REMOVED SHALL BE DONE SO BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 2 WORKING DAYS IN ADVANCE. THE CONTRACTOR SHALL PROVIDE A 24-HOUR TELEPHONE NUMBER FOR EMERGENCIES.
10. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING WORK.
11. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION.
12. CRUSHED AGGREGATE BASE (CAB) PER SECTION 200-2.2 OF THE STANDARD SPECIFICATIONS SHALL BE USED FOR ALL BASE MATERIAL. ACCEPTABLE SUBSTITUTION: CRUSHED MISCELLANEOUS BASE (CMB) PER SECTION 200-2.4 OF THE STANDARD SPECIFICATIONS MAY BE USED AS BASE MATERIAL UNDER FACILITIES AS INDICATED ON THE PLANS.
13. MINIMUM LENGTH OF FULL HEIGHT CURB BETWEEN DRIVEWAYS ON THE SAME LOT SHALL BE 20 FEET.
14. DURING NON-CONSTRUCTION HOURS, ALL EXCAVATIONS MUST BE APPROPRIATELY SHORED AND PLATED OR BACKFILLED, EXCEPT BORE PITS WHICH SHALL BE SECURED WITH K-RAIL AND 6' HIGH CHAIN LINK FENCE PANELS SECURED IN PLACE TO THE SATISFACTION OF THE PUBLIC WORKS INSPECTOR OR ENGINEER. PLATES SHALL BE TACK WELDED, PINNED AND/OR SECURED IN PLACE BY ANOTHER METHOD APPROVED BY THE INSPECTOR OR ENGINEER.
15. THE CONTRACTOR SHALL MAKE AVAILABLE FOR THE INSPECTOR'S REVIEW, ON A DAILY BASIS, AS-BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAY'S ACTIVITIES. WORK SHALL NOT BE CONSIDERED AS COMPLETE UNTIL AS-BUILT DRAWINGS ARE SUBMITTED TO AND ACCEPTED BY THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS DIRECTOR AND CALTRANS.
16. CONTRACTOR WILL MAINTAIN ACCESS TO ALL DRIVEWAYS AND CROSS ROADS AT ALL TIMES.
17. ALL WORK SHALL BE PERFORMED WITHIN 9 AM AND 3 PM, MONDAY THROUGH FRIDAY, UNLESS APPROVED BY THE ENGINEER.
18. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY EROSION IN ACCORDANCE WITH THE PLANS AND AS DIRECTED BY THE ENGINEER. SPECIAL ATTENTION SHALL BE GIVEN TO PREVENT ANY CONSTRUCTION DEBRIS IN THE EXISTING TRAIL ALONG THE NORTH SIDE OF THE PROJECT.
19. CONTRACTOR SHALL PROVIDE TEMP. DRAINAGE DURING CONSTRUCTION AND PREVENT ANY FLOW FROM THE CONSTRUCTION SITE TO FLOW TOWARDS THE SAN DIEGO CREEK.
20. DURING EARTH MOVING ACTIVITIES, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHAEOLOGIST/PALEOTOLOGIST ON SITE AND FOLLOW HIS INSTRUCTIONS.
21. THE CONTRACTOR SHALL CEASE WORK IF EVIDENCE OF CONTAMINATION IS FOUND AND IMMEDIATELY INFORM THE ENGINEER.

MASTER LIST OF CONSTRUCTION NOTES:

- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- RM — REMOVE EXISTING IMPROVEMENT.
- SD — STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- 1 — SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- 2 — CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- 2A — CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- 3 — CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- 4 — CONSTRUCT CURB RAMP PER CITY OF IRVINE STD. PLAN NO. 202.
- 4A — CONSTRUCT CUSTOM CURB RAMP PER DETAIL CR-2 ON SHEET C-2 WITH RETAINING CURB AT BACK OF RAMP.
- 4B — SAWCUT AND REMOVE EXISTING DEPRESSED CONCRETE CURB & GUTTER AND CONSTRUCT DEPRESSED CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 202. MATCH EXISTING RAMP WIDTH AND WINGS, 0" CURB FACE, 5% GUTTER PLATE.
- 6 — SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- 7 — COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE OVER 0' TO 0.64' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- 8 — COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- 9 — NOT USED
- 10 — CONSTRUCT 0.20' ARHM OVERLAY OVER 0.20' TO 0.50' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- 11 — CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- 12 — CONSTRUCT PARABOLIC MEDIAN CURB FLARE PER CITY OF IRVINE STD. PLAN NO. 108 (L=100').
- 13 — NOT USED
- 14 — CONSTRUCT 4" THICK PCC MEDIAN PAVEMENT ON 4" MINIMUM THICKNESS SAND.
- 15 — FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- 16 — TO 18 NOT USED
- 19 — REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- 20 — CENTERLINE TIES TO BE RECORDED AND RE-ESTABLISHED BY OTHERS. CONFIRM COMPLETE PRIOR TO IMPACTING.
- 21 — NOT USED
- 22 — CONSTRUCT DRIVEWAY PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I-A. SEE DW DETAILS ON SHEET C-1 FOR DRIVEWAY PROFILES.
- 23 — CONSTRUCT TYPE II LATEX SLURRY SEAL ACROSS ENTIRE ROADWAY SURFACE.
- 24 — CONSTRUCT MODIFIED TYPE "D" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200 AND DETAIL 24 ON SHEET C-1. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- 25 — CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- 26 — CONSTRUCT TYPE-B RETAINING CURB PER DETAIL 26 ON SHEET C-1 (H=3').
- 26A — CONSTRUCT TYPE-B RETAINING CURB PER DETAIL 26A ON SHEET C-1 (H=4').
- 27 — CONSTRUCT CURB HEIGHT TRANSITION FROM 8" CURB FACE (TO JOIN EXISTING 6" MEDIAN CURB)
- 28 — SAWCUT, REMOVE EXISTING AND CONSTRUCT 0.33 AC SURFACE COURSE OVER 0.50' AB. MAINTENANCE ACCESS ROAD.
- 29 — CONSTRUCT DRIVEWAY PER CITY OF IRVINE STD. PLAN NO. 205 TYPE II-B.
- 29A — INSTALL 12' X 3' CAST-IN-PLACE DETECTABLE WARNING SURFACE, COLOR ONYX BLACK PER CITY OF IRVINE STD. PLAN NO. 202.
- 30 — CONSTRUCT PARKWAY DRAIN PER SPPWC STANDARD PLAN 151-2, INLET TYPE 2 (W=5').
- 31 — INSTALL "SURFACE APPLIED" DETECTABLE WARNING SURFACE, COLOR "BLACK" PER CITY OF IRVINE STD. PLAN NO. 202.
- 31A — INSTALL "SURFACE APPLIED" DETECTABLE WARNING SURFACE, COLOR "YELLOW" PER CALTRANS STD PLAN A88A.
- 32A — CONSTRUCT MODIFIED DRIVEWAY/RAMP PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I-A AND DETAIL 32A ON SHEET C-1.
- 32B — CONSTRUCT DEPRESSED CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I-A AND DETAIL 32B ON SHEET C-1.
- 33 — CONSTRUCT TYPE "B-6" RAISED MEDIAN NOSE CURB PER CITY OF IRVINE STD. PLAN NO. 110 & 200. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- 34 — CONSTRUCT METAL HAND RAIL ON TOP OF PROPOSED CMU WALL PER SPPWC 606-4, TYPE B.
- 35 — TO 39 NOT USED
- 40 — CONSTRUCT 5' HIGH CHAIN LINK FENCE ON TOP OF EXISTING WALL PER SPPWC 600-3.
- 41 — CONSTRUCT TYPE 5, CASE 1 REINFORCED CONCRETE RETAINING WALL PER CALTRANS STD B3-4A, AND PER SECTION B-B ON SHEET C-2, WITH 5' HIGH CHAIN LINK FENCE ON TOP PER SPPWC 600-3. JOIN EX. WALL WITH DOWELS (#4 @ 12" O.C.).
- 42 — CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING WITH #4 REBAR AT 12" O.C. IN BOTH DIRECTIONS PER SECTION A-A ON SHEET C-2.
- 43 — CONSTRUCT BOLLARDS AT 5' ON CENTER PER DETAIL 43 ON SHEET C-2.
- 44 — INSTALL NEW GUARD RAILING ON METAL POSTS PER CITY OF IRVINE STD 401.
- 45 — INSTALL PEDESTRIAN BARRICADE TYPE I PER CALTRANS STD PLAN ES-7Q.
- 46 — RELOCATE IRRIGATION METER PER SHEETS C-1 AND U-3.
- 60 — CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 61 — CONSTRUCT DOUBLE 3'W X 1'H REINFORCED CONCRETE BOX (RCB) PER CALTRANS STANDARD PLAN D81 AND DETAIL 83 ON SHEET DD-1.
- 62 — MODIFY EXISTING STORM DRAIN JUNCTION STRUCTURE TO ENLARGE OPENING WITH HANDHELD TOOLS TO ACCOMODATE PROPOSED RCP OUTSIDE DIAMETER. PLACE HIGH STRENGTH NON SHRINK GROUT ALL AROUND PIPE/JUNCTION STRUCTURE CONNECTION. JOIN CONRETE COLLAR TO EXISTING JUNCTION STRUCTURE WITH #4 BARS EMBEDDED 6" EACH SIDE @ 12" O.C.
- 63 — CONSTRUCT 30"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 64 — CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306.
- 65 — MODIFY EXISTING STORM DRAIN RCB TRANSITION STRUCTURE TO ENLARGE OPENING WITH HANDHELD TOOLS TO ACCOMODATE PROPOSED RCP OUTSIDE DIAMETER. PLACE HIGH STRENGTH NON SHRINK GROUT ALL AROUND PIPE/TRANSITION STRUCTURE CONNECTION. JOIN CONRETE COLLAR TO EXISTING TRANSITION STRUCTURE WITH #4 BARS EMBEDDED 6" EACH SIDE @ 12" O.C.
- 66 — CONSTRUCT RCB TO PIPE TRANSITION STRUCTURE PER SPPWC STANDARD PLAN 342-2.
- 67 — CONSTRUCT PIPE TO RCB JUNCTION STRUCTURE PER SPPWC STANDARD PLAN 333-2.
- 68 — CONSTRUCT CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300.
- 69 — CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- 70 — CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2').
- 70A — RECONSTRUCT A PORTION OF EXISTING LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (LENGTH PER PLAN).
- 71 — CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).
- 72 — CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225-2.
- 73 — REMOVE EXISTING IMPACT BASIN WITH VERTICAL BAFFLE WALL.
- 74 — REMOVE EXISTING CSP DROP INLET.
- 75 — REMOVE EXISTING REINFORCED CONCRETE DRAINAGE INLET AND PLUG EXISTING RCB PER SPPWC 381-2.
- 76 — REMOVE EXISTING CATCH BASIN (W PER PLAN).
- 77 — REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN (SIZE PER PLAN).
- 78 — CONSTRUCT 60"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 79 — CONSTRUCT 2' THICK CONCRETE PLUG IN EXISTING PIPE.
- 80 — INSTALL FILTERRA UNIT PER MANUFACTURER RECOMMENDATIONS AND DETAIL 80 ON SHEET DD-1 (DIMENSIONS PER PLAN).
- 81 — INSTALL 4"SCH-40 PVC PIPE FROM FILTERRA UNIT TO PROPOSED CATCH BASIN PER CITY OF IRVINE STANDARD PLAN 223 AND 318 AND DETAIL 81 ON SHEET DD-1.
- 82 — CONSTRUCT MODIFIED LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2'). MODIFIED WITH 3' WARPED GUTTER SURFACE.
- 83 — CONSTRUCT MODIFIED JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306 AND DETAIL 83 ON SHEET DD-1.
- 84 — CONSTRUCT MODIFIED CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300 AND DETAIL 84 ON SHEET RW-2.
- 84A — CONSTRUCT V DITCH TO "U" GUTTER TRANSITION. MATCH EXISTING V DITCH UPSTREAM AND MATCH 5' X 1.5' INLET OPENING DOWNSTREAM. PLACE 12" LONG #4 "L" DOWELS AT 12" O.C. TO JOIN "U" GUTTER WITH INLET BOX.
- 85 — TO 89 NOT USED
- 90 — CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL WITH FRACTURED RIB ARCHITECTURAL TREATMENT PER CALTRANS STANDARD PLAN B3-1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X-1. FRACTURED RIB ARCHITECTURAL TREATMENT PER DETAIL 90 ON SHEET RW-1.
- 91 — INSTALL CABLE RAILING FOR RETAINING WALL WITH GUTTER PER CALTRANS STANDARD PLAN B11-47 (SECTION C-C).
- 92 — CONSTRUCT WALL EXPANSION JOINT PER CALTRANS STANDARD PLAN B0-3 (INTERVALS PER PROFILE).
- 93 — CONSTRUCT WALL WEAKENED PLANE JOINT PER CALTRANS STANDARD PLAN B0-3 (INTERVALS PER PROFILE).
- 94 — CONSTRUCT WALL GUTTER PER CALTRANS STANDARD PLAN B3-6.
- 95 — CONSTRUCT "WALL DRAIN WITH PIPE DOME" (WITH 4" PVC PIPE) AND OVERFLOW SCUPPER ("WALL DRAIN DETAIL") PER CALTRANS STANDARD PLAN B3-6.
- 96 — CONSTRUCT "RETAINING WALL GUTTER OUTLET" PER CALTRANS STANDARD PLAN B3-6.
- 97 — CONSTRUCT TYPE 6A (CASE 1) CMU RETAINING WALL PER CALTRANS STANDARD PLAN B3-7A (DESIGN H=3'-4"). BLOCK AND COLOR TO MATCH EXISTING.
- 97A — MODIFY FS IN FRONT OF WALL PER ELEVATIONS ON PLAN AND MAINTAIN 12" MINIMUM COVER OVER EXISTING FOOTING. FIELD CONFIRM EXISTING FOOTING DEPTH PRIOR TO REMOVAL. CLEAN NEWLY EXPOSED WALL FACE.
- 98 — REMOVE EXISTING PCC IMPROVEMENT (IMPROVEMENT PER PLAN).
- 99 — GRADE EXISTING SLOPE (2:1 MAXIMUM) PER SECTION A-A ON SHEET RW-2. FILL AREAS TO BE BENCHED PER O.C.P.W STD. PLAN 1322.

MASTER LIST OF SIGNING AND STRIPING NOTES:

- BO — INSTALL PAINTED WHITE "BIKE ONLY" PAVEMENT LEGENDS AND BIKE LANE ARROW (CITY STENCIL OR EXACT EQUAL).
- CH — INSTALL PAINTED 12-INCH WIDE WHITE CHEVRON LINES AT 30' SPACING.
- LL — INSTALL 50' LONG PAINTED 4-INCH WIDE WHITE LEAD LINE WITH ONE TYPE G CLEAR RETROREFLECTIVE PAVEMENT MARKER AT EACH END PER DETAIL 1 ON SHEET PDS-1.
- LM — INSTALL PAINTED PAVEMENT LEGEND MARKINGS AS SHOWN ON PLAN (CITY STENCIL OR EXACT EQUAL).
- N — INSTALL NEW SIGN. SIGN TYPE AND LOCATION AS SHOWN ON PLAN.
- P — PROTECT EXISTING SIGN IN-PLACE.
- R — REMOVE EXISTING SIGN.
- RO — REMOVE AND RELOCATE EXISTING SIGN BY OTHERS. LOCATION SHOWN ON PLAN.
- RR — REMOVE AND RELOCATE EXISTING SIGN. LOCATION SHOWN ON PLAN.
- SB — SAND BLAST CONFLICTING EXISTING STRIPING.
- SL — REMOVE AND RELOCATE EXISTING SIGN ON EXISTING STREET LIGHT. RELOCATE TO NEAREST NEW STREET LIGHT PER STREET LIGHT PLANS.
- UT — REMOVE AND RELOCATE EXISTING SIGN TO LOCATION OF RELOCATED UTILITY.
- XW — INSTALL PAINTED 12-INCH WIDE WHITE LIMIT LINE OR CROSSWALK. IF APPLICABLE, INSTALL 12-INCH WIDE CORNER CROSSWALK STRIPING PER CITY STANDARD PLAN 203.
- Y — INSTALL PAINTED 12-INCH WIDE YELLOW LINE AT 30' SPACING.
- 4L — INSTALL PAINTED WHITE TYPE IV (L) PAVEMENT ARROW (LEFT) (CITY STENCIL OR EXACT EQUAL).
- 4R — INSTALL PAINTED WHITE TYPE IV (R) PAVEMENT ARROW (RIGHT) (CITY STENCIL OR EXACT EQUAL).
- 6 — INSTALL PAINTED WHITE TYPE VI PAVEMENT ARROW (CITY STENCIL OR EXACT EQUAL).
- 9 — INSTALL PAINTED 4-INCH WIDE WHITE SKIP LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20A, DETAIL 9.
- 24 — INSTALL PAINTED 4-INCH WIDE YELLOW EDGE LINE PER CALTRANS STANDARD PLAN A20B, DETAIL 24.
- 26 — INSTALL REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 26.
- 27 — INSTALL PAINTED 4-INCH WIDE DOUBLE YELLOW EDGE LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 27.
- 27B — INSTALL PAINTED 4-INCH WIDE WHITE EDGE LINE PER CALTRANS STANDARD PLAN A20B, DETAIL 27B.
- 29 — INSTALL PAINTED 4-INCH WIDE DOUBLE YELLOW CENTERLINE MEDIAN AND RAISED PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 29.
- 38 — INSTALL PAINTED 8-INCH WIDE WHITE CHANNELLIZING LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20D, DETAIL 38.
- 39 — INSTALL PAINTED 6-INCH WIDE WHITE BIKE LANE LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39.
- 39A — INSTALL PAINTED 6-INCH WIDE WHITE SKIP BIKE LANE INTERSECTION LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39A.
- 40 — INSTALL PAINTED 4-INCH WIDE WHITE LANE LINE EXTENSION THROUGH INTERSECTIONS PER CALTRANS STANDARD PLAN A20D, DETAIL 40.

MASTER LIST OF DISPOSITION NOTES:

- A — ADJUST TO GRADE (IMPROVEMENT TYPE SHOWN ON PLAN).
- AB — ADJUST TO GRADE BY OTHERS (IMPROVEMENT TYPE AND OWNER SHOWN ON PLAN).
- BM — RESET OC SURVEY BENCH MARK PER ROADWAY PLANS.
- CL — RESET CENTER LINE MONUMENT AND/OR CENTER LINE TIE PER ROADWAY PLANS.
- IR — PROTECT/MODIFY/RELOCATE EXISTING IRRIGATION IMPROVEMENT AS REQUIRED PER NEW GRADES AND PER IRRIGATION PLANS.
- P — PROTECT IN PLACE (IMPROVEMENT TYPE PER PLAN).
- RL — RELOCATE EXISTING IMPROVEMENT (TYPE PER PLAN) BY CONTRACTOR UNLESS NOTED OTHERWISE TO BE PERFORMED BY UTILITY OWNER.
- RM — REMOVE EXISTING IMPROVEMENT (TYPE PER PLAN). PLACE COMPACTED BACKFILL AS NEEDED TO FILL REMAINING VOIDS.
- SL — PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING STREET LIGHT IMPROVEMENT PER STREET LIGHT IMPROVEMENT PLANS.
- SM — CUT AND REMOVE INTERFERING SECTION OF CONCRETE SLAB AND PROTECT SEWER MANHOLE IN PLACE.
- TS — PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLANS.

CITY OF IRVINE (SEE SHEETS 17-22)

(2013 EDITION)

107	PARABOLIC CURB TRANSITION
200	CONCRETE CURBS AND GUTTERS
201	SIDEWALK DETAIL
202	CURB RETURN DETAILS
223	UTILITY TRENCH REPAIR
300	CATCH BASIN TYPE I
301	CATCH BASIN TYPE II
303	LOCAL DEPRESSION
306	JUNCTION STRUCTURE NO. I
310	CONCRETE COLLAR
311	22" PARKWAY MANHOLE FRAME AND COVER
318	STORM DRAIN BEDDING DETAIL
TS-2	TRAFFIC SIGNAL PULL BOXES
TS-3	SIGNAL INTERCONNECT CABLES
TS-7	TYPE IIB SERVICE/BBS DETAILS
TS-8C	ATMS 332L DETECTOR SCHEDULE
TS-8D	ATMS DUAL 332L DETECTOR SCHEDULE
TS-9A	ATMS CABINET FOUNDATIONS
TS-9B	ATMS 332L CABINET PLACEMENT
TS-9C	ATMS 332L CABINET LAYOUT
TS-9D	ATMS DUAL 332L CABINET LAYOUT
TS-9E	ATMS DUAL 332L INTERFACE PANEL
TS-10A	ATMS CABINET INTERCONNECT TERMINATION
TS-11A	ATMS CABINET COMMUNICATION

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC) (SEE SHEET 33)

(2012 EDITION)

151-2	PARKWAY DRAIN
225-2	BLANKET PROTECTION FOR PIPES
333-2	JUNCTION STRUCTURE-PIPE TO RCB
342-2	TRANSITION STRUCTURE RCB TO PIPE
381-2	ABANDONMENT SEALS FOR MANHOLES AND INLETS
606-4	METAL HAND RAILINGS

CALTRANS

(2015 EDITION)

A3A - A3C	ABBREVIATIONS, LINES, AND SYMBOLS
A20A - A20D	PAVEMENT MARKERS AND TRAFFIC LINES
A24A - A24F	PAVEMENT MARKINGS
A74	SURVEY MONUMENTS
B0-3	WALL DETAILS
B3-1B	RETAINING WALL TYPE 1 (CASE 2)
B3-6	WALL DRAIN WITH PIPE DOME
B3-7A	RETAINING WALL TYPE 6 (CASE 1)
B11-47	CABLE RAILING (SECTION C-C)
D81	CAST-IN-PLACE REINFORCED CONCRETE DOUBLE BOX CULVERT
RSP 3S-1A	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)
RSP ES-1B	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)
RSP ES-1C	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

UTILITY CONTACTS:

UTILITY	CONTACT	PHONE NUMBER
AT&T- DISTRIBUTION	MR. BOB FLEISHER	(714) 618-9129
CITY OF NEWPORT BEACH	MR. GEORGE MURDOCH	(949) 718-3400
CLEAR CHANNEL OUTDOOR	MR. KEVIN KOCIC	(213) 305-0045
COX COMMUNICATIONS	MS. DEBBI BORROEL	(949) 563-8860
IRVINE RANCH WATER DISTRICT	MR. BELISARIO RIOS	(949) 453-5394
LEVEL 3 COMMUNICATIONS	MR. JOHN TRUJILLO	(720) 888-4465
MESA WATER DISTRICT	MR. MARK PELKA	(949) 631-1200
METROPOLITAN WATER DISTRICT	SUBSTRUCTURES TEAM	(213) 217-6679
MPOWER COMMUNICATIONS	MR. MARK DENNING	(949) 864-0296
ORANGE COUNTY WATER DISTRICT	MR. CHRIS OLSEN	(714) 378-3200
SOUTHERN CALIFORNIA EDISON - DISTRIBUTION	MS. SHARA FARRIS	(949) 458-4437
SOUTHERN CALIFORNIA EDISON - TELECOM	MR. RODNEY PORTER	(626) 308-6533
SOUTHERN CALIFORNIA GAS COMPANY - DISTRIBUTION	MR. WILSON BALDELOMAR	(714) 634-5091
SOUTHERN CALIFORNIA GAS COMPANY - TRANSMISSION	MS. ROSALYN SQUIRES	(818) 701-4546
TIME WARNER CABLE	MR. DAVE DOLNEY	(714) 903-8446
TRANSPORTATION CORRIDOR AGENCIES	MR. DAVID LOWE	(949) 754-3488
WILSHIRE CONNECTION LLC	MR. JOSE JR. T. CUELA	(213) 550-5233
ZAYO FNA ABOVENET	MR. GEORGE HUSS	(443) 403-2023

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY: GG/MG/CM	DATE	JUL 2016
DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

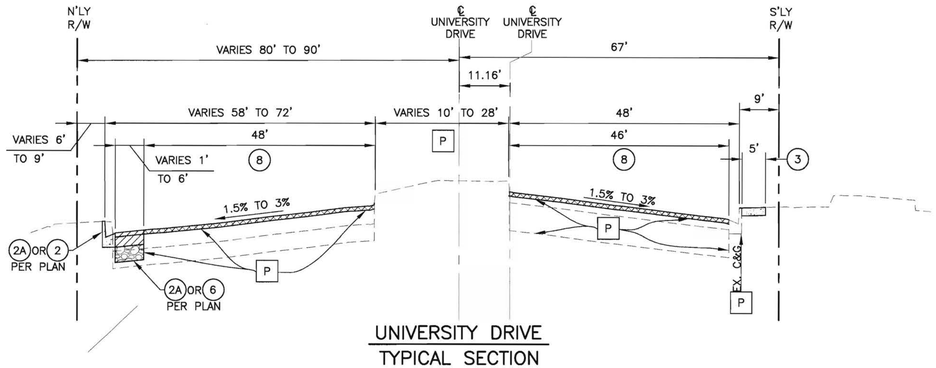
IRWD CODE 6788 | C.I.P. NO. 311306

GENERAL NOTES
UNIVERSITY DRIVE WIDENING
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

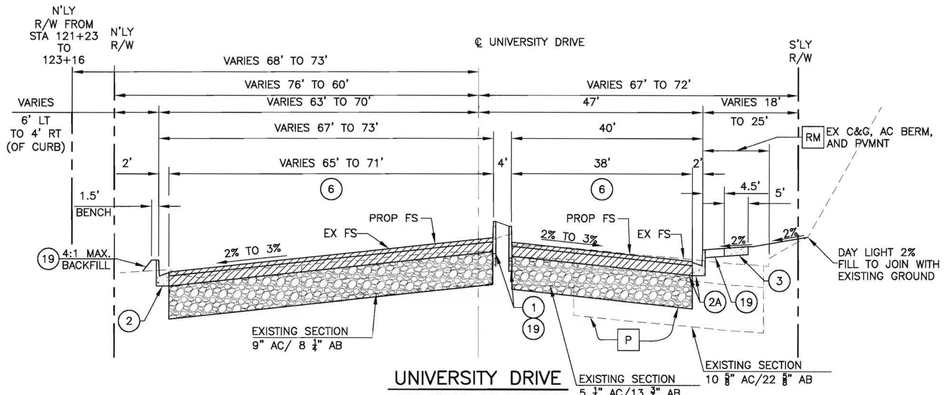
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SHT 2 OF 87



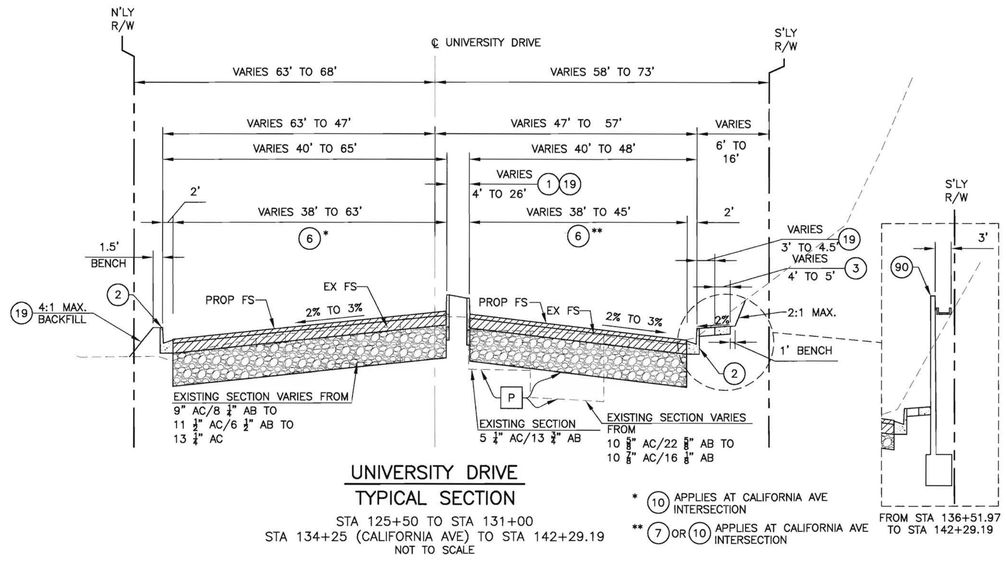
UNIVERSITY DRIVE
TYPICAL SECTION

STA 115+00 MACARTHUR BLVD SB RAMPS TO STA 119+58.17
NOT TO SCALE



UNIVERSITY DRIVE
TYPICAL SECTION

STA 119+58.17 TO STA 125+50
NOT TO SCALE

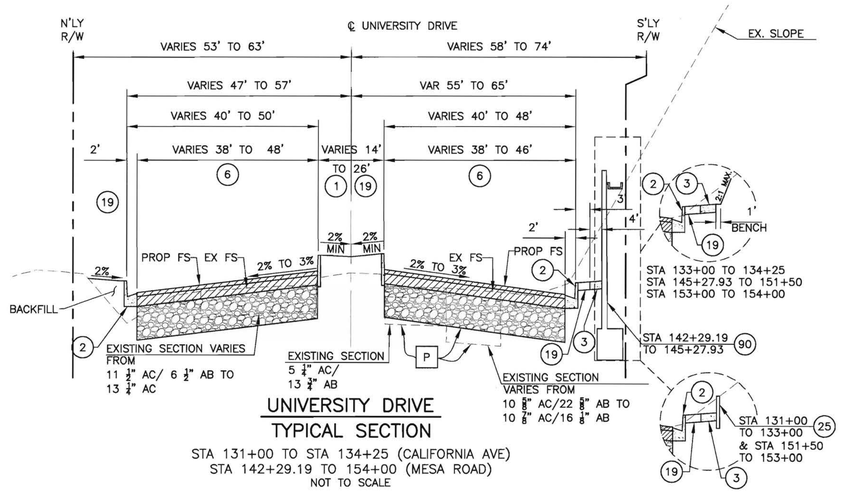


UNIVERSITY DRIVE
TYPICAL SECTION

STA 125+50 TO STA 131+00
STA 134+25 (CALIFORNIA AVE) TO STA 142+29.19
NOT TO SCALE

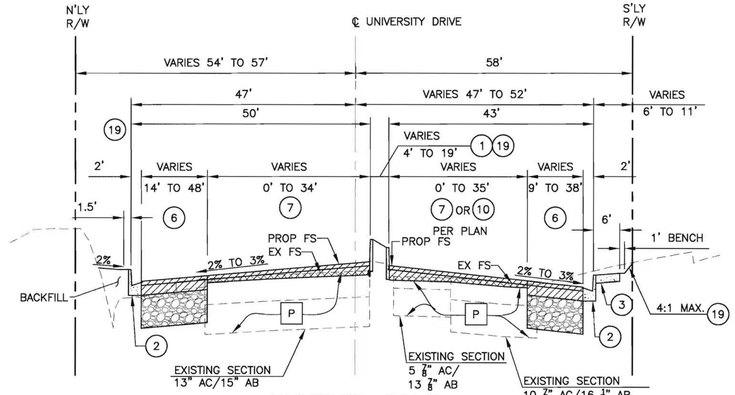
* (10) APPLIES AT CALIFORNIA AVE INTERSECTION

** (7) OR (10) APPLIES AT CALIFORNIA AVE INTERSECTION



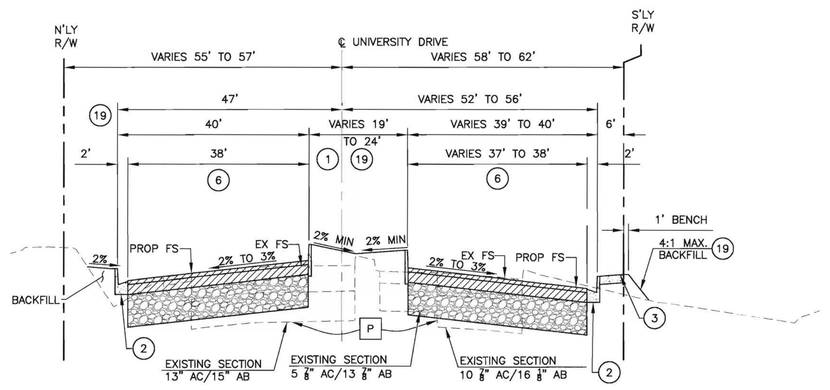
UNIVERSITY DRIVE
TYPICAL SECTION

STA 131+00 TO STA 134+25 (CALIFORNIA AVE)
STA 142+29.19 TO 154+00 (MESA ROAD)
NOT TO SCALE



UNIVERSITY DRIVE
TYPICAL SECTION

STA 154+00 (MESA ROAD) TO STA 160+08.49
NOT TO SCALE



UNIVERSITY DRIVE
TYPICAL SECTION

STA 160+08.49 TO STA 162+16.71
NOT TO SCALE

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (2A) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (7) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE OVER 0' TO 0.64' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (8) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (10) CONSTRUCT 0.20' ARHM OVERLAY OVER 0.20' TO 0.50' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (90) CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL WITH FRACTURED RIB ARCHITECTURAL TREATMENT PER CALTRANS STANDARD PLAN B3-1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X-1. FRACTURED RIB ARCHITECTURAL TREATMENT PER DETAIL 90 ON SHEET RW-1.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- AGGREGATE BASE PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTES (7) (8)
- TYPE II LATEX SLURRY SEAL PER CONSTRUCTION NOTE (23)
- PCC PER CONSTRUCTION NOTE (3) (4) (22) (42)
- ASPHALT CONCRETE OVERLAY PER CONSTRUCTION NOTE (10)

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

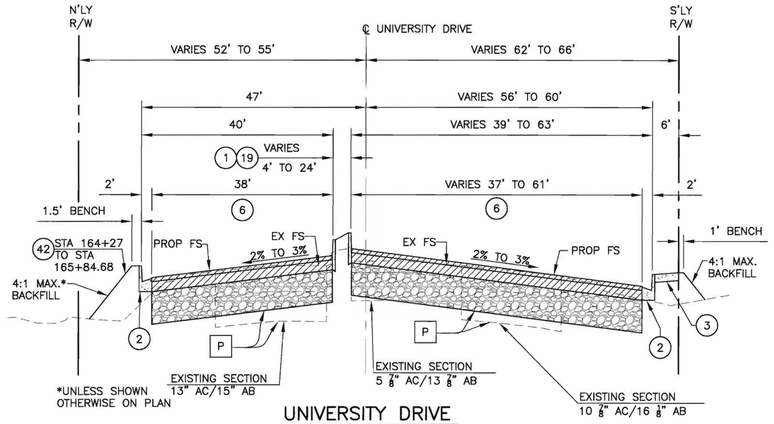
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

TYPICAL SECTIONS
UNIVERSITY DRIVE WIDENING

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

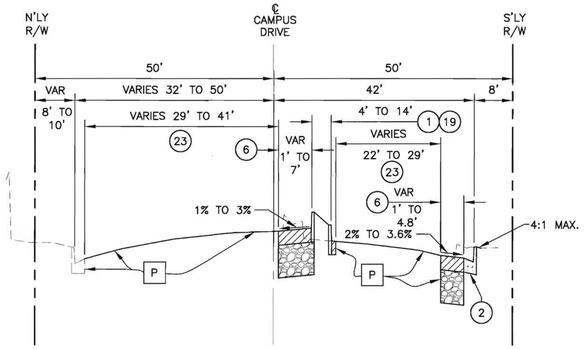
IRWD CODE 6788 | C.I.P. NO. 311306
PLAN CHECK NO. 00663284-EMC
X-1
SHT 3 OF 87



UNIVERSITY DRIVE
TYPICAL SECTION

STA 162+16.71 TO STA 166+13.89 (CAMPUS DRIVE)

NOT TO SCALE



CAMPUS DRIVE
TYPICAL SECTION

STA 300+81.29 TO STA 305+66.69

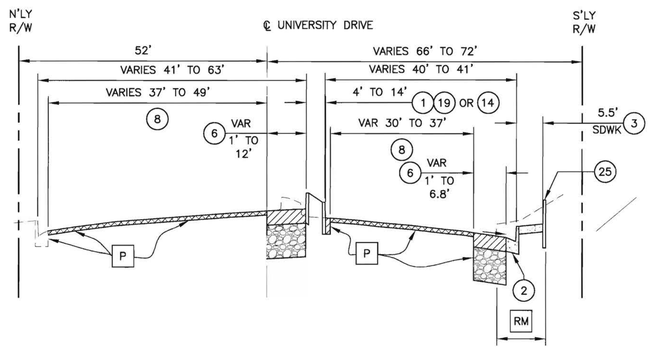
NOT TO SCALE

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- AGGREGATE BASE PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTES (7) (8)
- TYPE II LATEX SLURRY SEAL PER CONSTRUCTION NOTE (23)
- PCC PER CONSTRUCTION NOTE (3) (4) (22) (42)
- ASPHALT CONCRETE OVERLAY PER CONSTRUCTION NOTE (10)

CONSTRUCTION NOTES

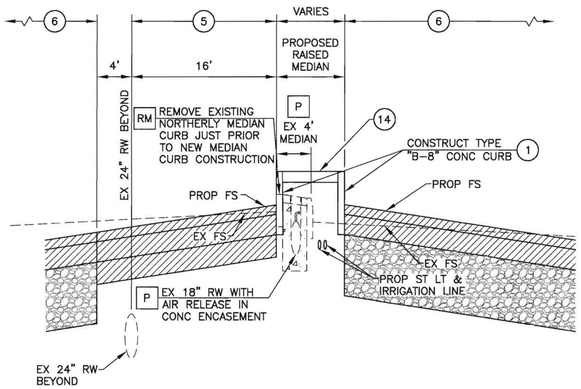
- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- RM — REMOVE EXISTING IMPROVEMENT.
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (8) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (14) CONSTRUCT 4" THICK PCC MEDIAN PAVEMENT ON 4" MINIMUM THICKNESS SAND.
- (15) FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (23) CONSTRUCT TYPE II LATEX SLURRY SEAL ACROSS ENTIRE ROADWAY SURFACE.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (42) CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING WITH #4 REBAR AT 12" O.C. IN BOTH DIRECTIONS PER SECTION A-A ON SHEET C-2.



UNIVERSITY DRIVE
TYPICAL SECTION

STA 166+13.89 TO STA 172+08.04

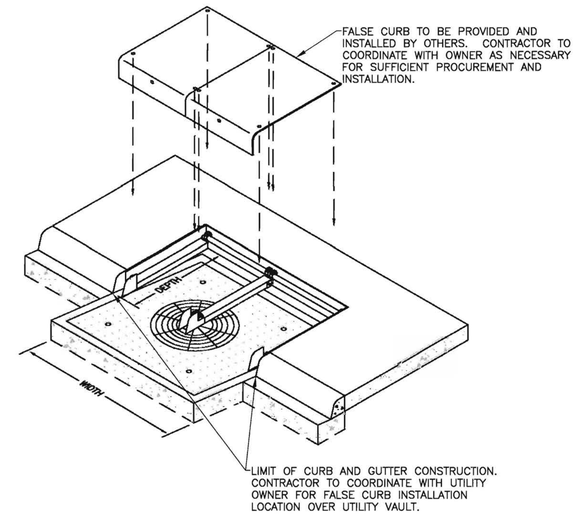
NOT TO SCALE



SECTION Z-Z
MEDIAN DETAIL

STA 158+70 TO STA 159+20

NOT TO SCALE



15 FALSE CURB DETAIL

NOT TO SCALE

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
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PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

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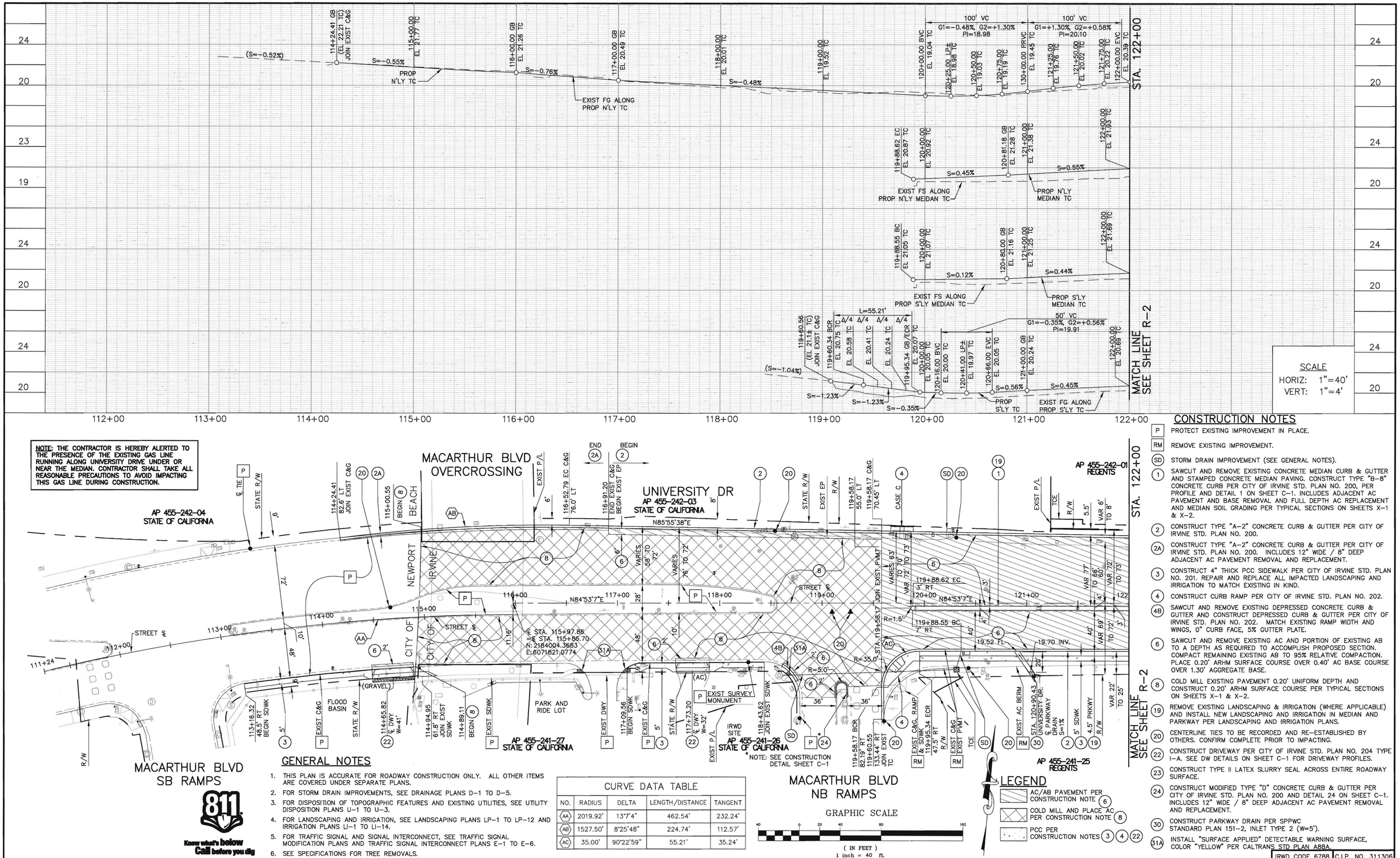
IRWD CODE 6788 | C.I.P. NO. 311306

TYPICAL SECTIONS
UNIVERSITY DRIVE WIDENING

PLAN CHECK NO. 00663284-EMC

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

X-2
SHT 4 OF 87



GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

CURVE DATA TABLE				
NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT
(AA)	2019.92'	13°7'4"	462.54'	232.24'
(AB)	1527.50'	8°25'48"	224.74'	112.57'
(AC)	35.00'	90°22'59"	55.21'	35.24'

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (SD) STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (2A) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (4) CONSTRUCT CURB RAMP PER CITY OF IRVINE STD. PLAN NO. 202.
- (4B) SAWCUT AND REMOVE EXISTING DEPRESSED CONCRETE CURB & GUTTER AND CONSTRUCT DEPRESSED CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 202. MATCH EXISTING RAMP WIDTH AND WINGS, 0" CURB FACE, 5% GUTTER PLATE.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (8) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (20) CENTERLINE TIES TO BE RECORDED AND RE-ESTABLISHED BY OTHERS. CONFIRM COMPLETE PRIOR TO IMPACTING.
- (22) CONSTRUCT DRIVEWAY PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I-A. SEE DW DETAILS ON SHEET C-1 FOR DRIVEWAY PROFILES.
- (23) CONSTRUCT TYPE II LATEX SLURRY SEAL ACROSS ENTIRE ROADWAY SURFACE.
- (24) CONSTRUCT MODIFIED TYPE "D" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200 AND DETAIL 24 ON SHEET C-1. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- (30) CONSTRUCT PARKWAY DRAIN PER SPPWC STANDARD PLAN 151-2, INLET TYPE 2 (W=5').
- (31A) INSTALL "SURFACE APPLIED" DETECTABLE WARNING SURFACE, COLOR "YELLOW" PER CALTRANS STD PLAN A88A.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTE (8)
- PCC PER CONSTRUCTION NOTES (3) (4) (22)

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

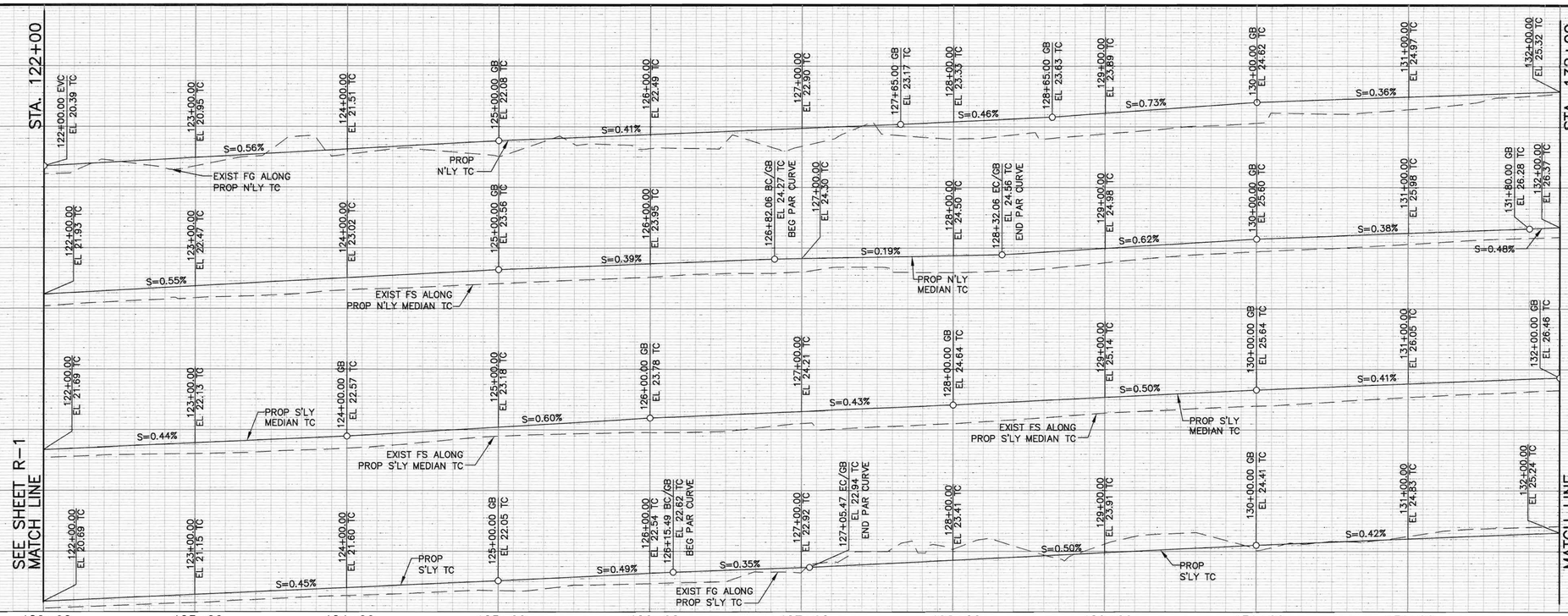
ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 113+16 (MACARTHUR BLVD SB RAMPS) TO STA 122+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

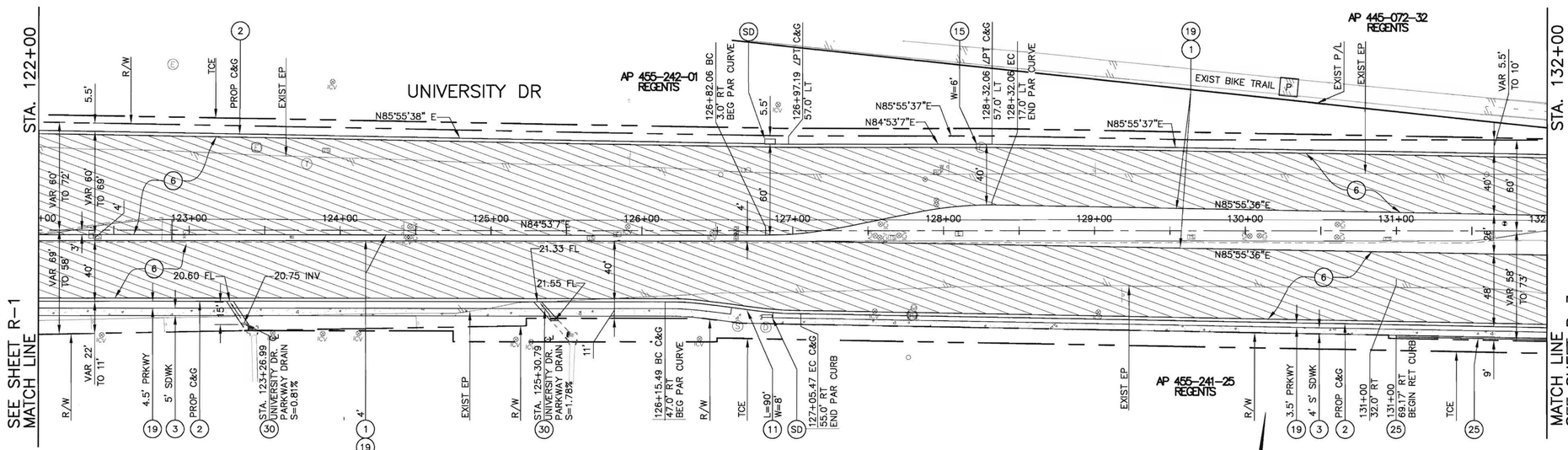
PLAN CHECK NO. 00663284-EMC

R-1

SHT 5 OF 87

IRWD CODE 6788 | C.I.P. NO. 311306





CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (SD) STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (11) CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- (15) FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (30) CONSTRUCT PARKWAY DRAIN PER SPPWC STANDARD PLAN 151-2, INLET TYPE 2 (W=5").

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- PCC PER CONSTRUCTION NOTE (3)

811 Know what's below Call before you dig

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates SM
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995
RANDALL G. BERRY RCE #44642 DATE 7/7/17

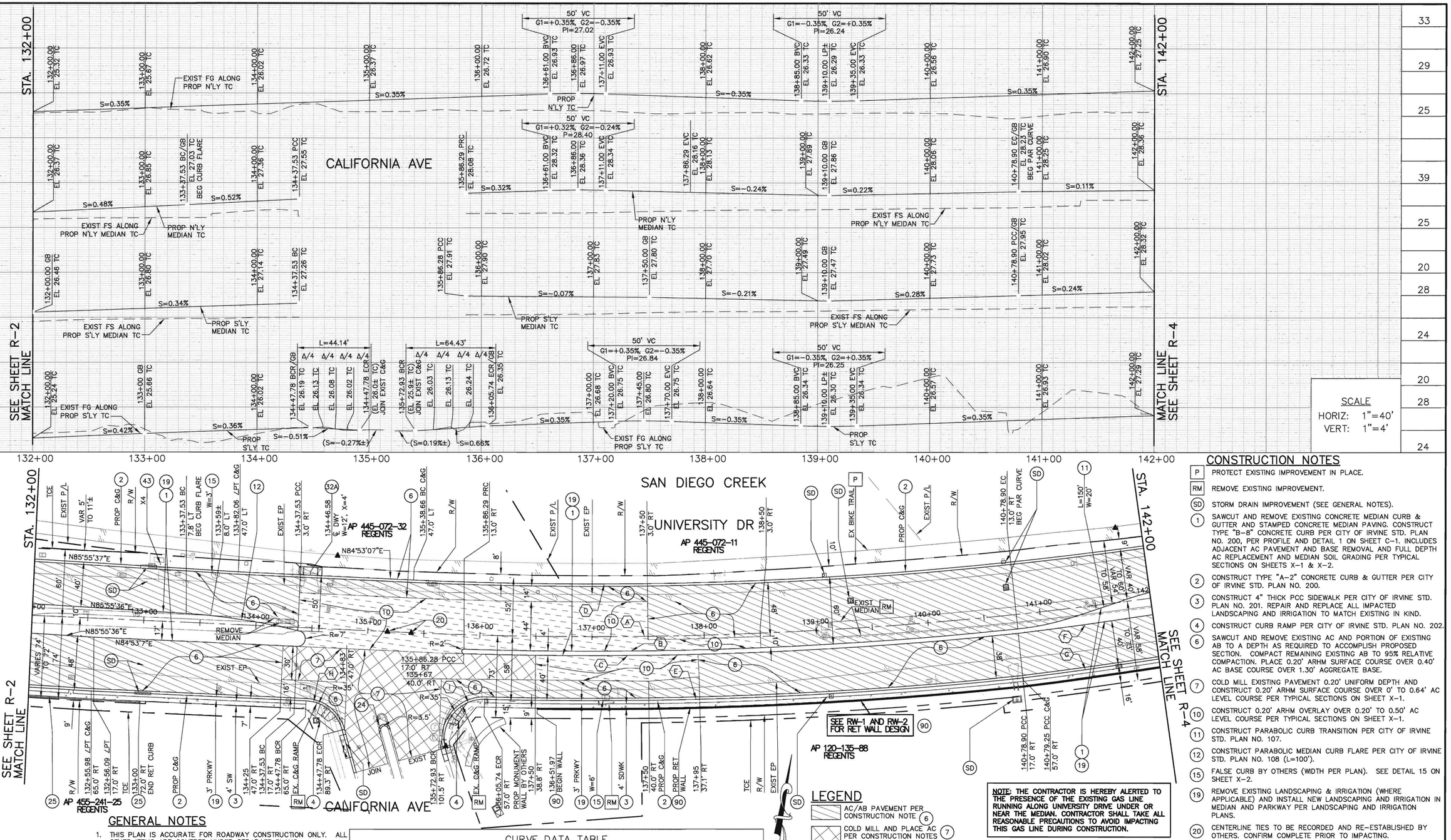
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 122+00 TO STA 132+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

R-2

SHT 6 OF 87



CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (SD) STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (4) CONSTRUCT CURB RAMP PER CITY OF IRVINE STD. PLAN NO. 202.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (7) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE OVER 0' TO 0.64' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (10) CONSTRUCT 0.20' ARHM OVERLAY OVER 0.20' TO 0.50' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (11) CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- (12) CONSTRUCT PARABOLIC MEDIAN CURB FLARE PER CITY OF IRVINE STD. PLAN NO. 108 (L=100').
- (15) FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (20) CENTERLINE TIES TO BE RECORDED AND RE-ESTABLISHED BY OTHERS. CONFIRM COMPLETE PRIOR TO IMPACTING.
- (24) CONSTRUCT MODIFIED TYPE "D" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200 AND DETAIL 24 ON SHEET C-1. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (32A) CONSTRUCT MODIFIED RAMP PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I-A AND DETAIL 32 ON SHEET C-1.

CONSTRUCTION NOTES CONT.

- (43) CONSTRUCT BOLLARDS AT 5' ON CENTER PER DETAIL 43 ON SHEET C-2.
- (90) CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL WITH FRACTURED RIB ARCHITECTURAL TREATMENT PER CALTRANS STANDARD PLAN B3-1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X-1. FRACTURED RIB ARCHITECTURAL TREATMENT PER DETAIL 90 ON SHEET RW-1.

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTES (7)
- PCC PER CONSTRUCTION NOTE (3) (4)
- ASPHALT CONCRETE OVERLAY PER CONSTRUCTION NOTE (10)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SCALE
HORIZ: 1"=40'
VERT: 1"=4'

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

CURVE DATA TABLE

NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT	NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT
A	3600.18'	42°05'08"	2644.44'	1385.06'	F	3612.18'	8°42'48"	549.33'	275.20'
B	3613.18'	7°50'23"	494.39'	247.58'	G	3652.18'	8°42'48"	555.41'	278.24'
C	3617.18'	7°50'23"	494.94'	247.86'	H	35'	72°15'50"	44.14'	25.55'
D	3553.18'	42°05'08"	2609.92'	1366.98'	I	35'	105°28'32"	64.43'	46.01'
E	3657.18'	7°32'09"	481.02'	240.86'					

Know what's below Call before you dig

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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REGISTERED PROFESSIONAL ENGINEER · RANDALL G. BERRY · NO. C44642 · RENEW. 3/31/18 · CIVIL · STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

RANDALL G. BERRY RCE #44642 — DATE 7/7/17

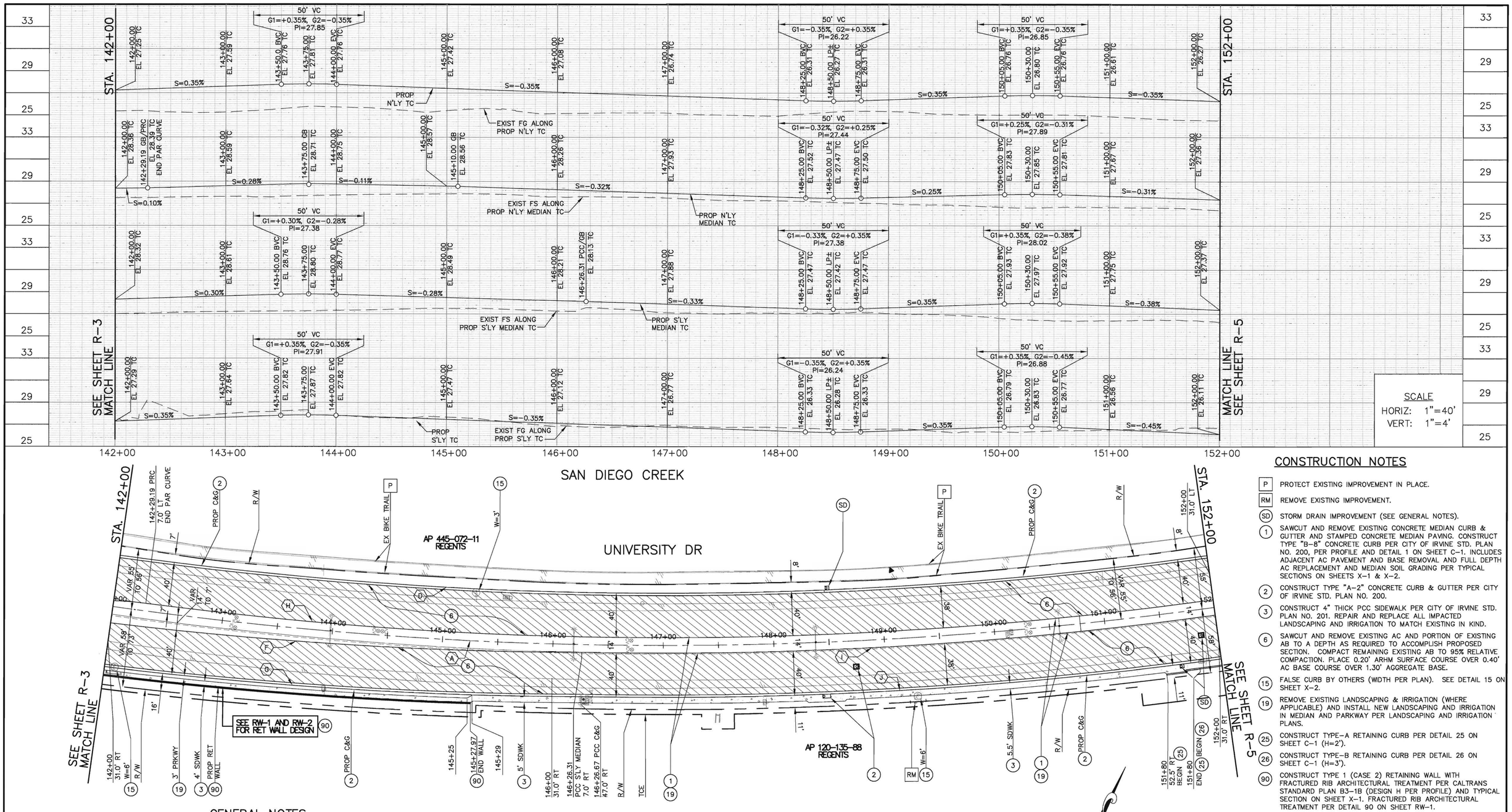
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
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CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 132+00 TO STA 142+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

R-3
SHT 7 OF 87



CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (SD) STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (15) FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (26) CONSTRUCT TYPE-B RETAINING CURB PER DETAIL 26 ON SHEET C-1 (H=3').
- (90) CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL WITH FRACTURED RIB ARCHITECTURAL TREATMENT PER CALTRANS STANDARD PLAN B3-1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X-1. FRACTURED RIB ARCHITECTURAL TREATMENT PER DETAIL 90 ON SHEET RW-1.

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

CURVE DATA TABLE

NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT	NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT
(A)	3600.18'	42°05'08"	2644.44'	1385.06'	(H)	3593.18'	20°28'06"	1283.63'	648.73'
(D)	3553.18'	42°05'08"	2609.92'	1366.98'	(I)	3607.18'	15°06'18"	950.97'	478.26'
(F)	3612.18'	8°42'48"	549.33'	275.20'	(J)	3647.18	11°18'22"	719.70'	361.02'
(G)	3652.18'	8°42'48"	555.41'	278.24'					

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- PCC PER CONSTRUCTION NOTE (3)

SCALE
HORIZ: 1"=40'
VERT: 1"=4'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

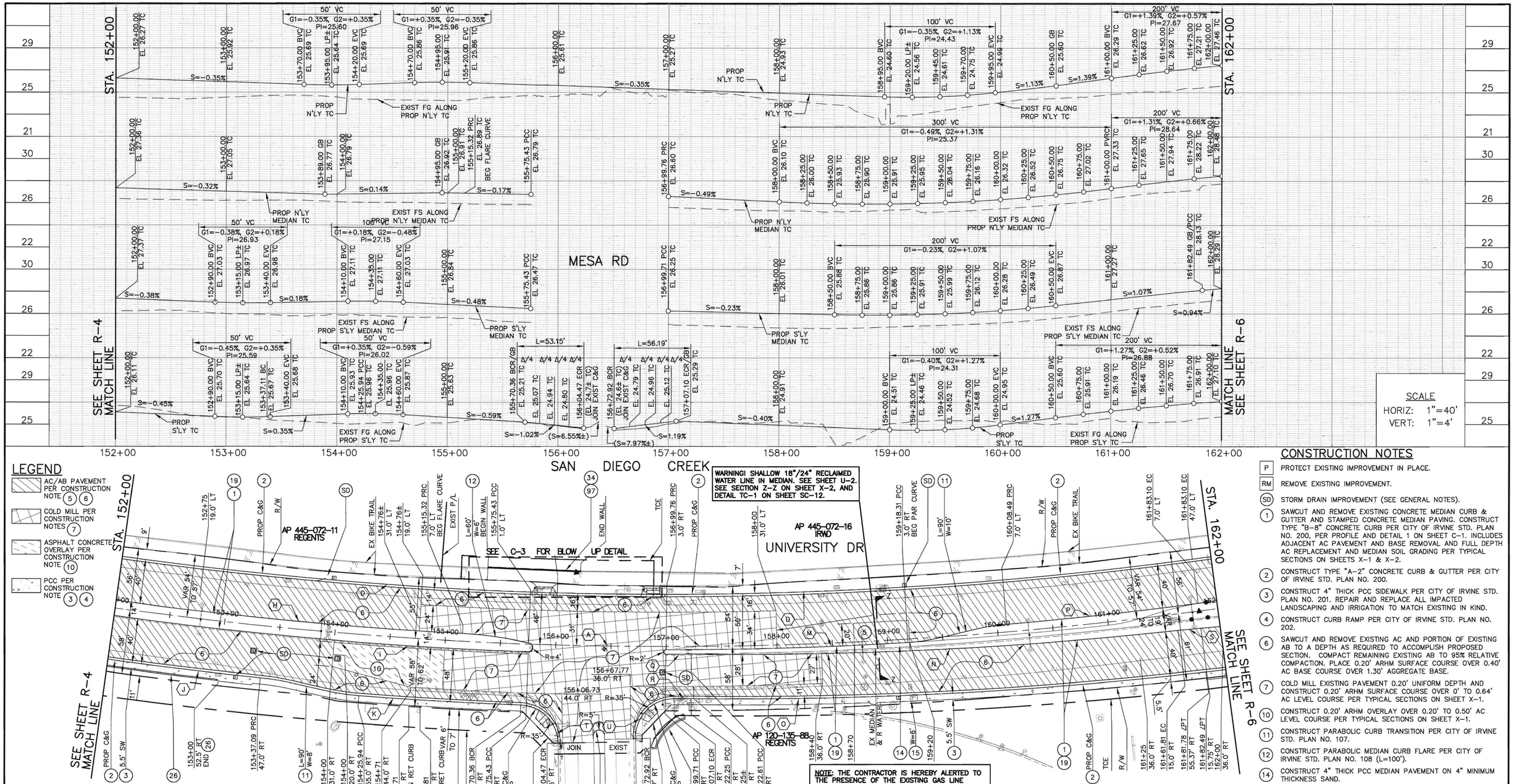
DRAWN BY: GG/MG/CM	DATE	JUL 2016
DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

IRWD CODE 6788 | C.I.P. NO. 311306

ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 142+00 TO STA 152+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

R-4
SHT 8 OF 87



LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (5) (6)
- COLD MILL PER CONSTRUCTION NOTES (7)
- ASPHALT CONCRETE OVERLAY PER CONSTRUCTION NOTE (10)
- PCC PER CONSTRUCTION NOTE (3) (4)

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

WARNING! SHALLOW 18"/24" RECLAIMED WATER LINE IN MEDIAN. SEE SHEET U-2. SEE SECTION Z-Z ON SHEET X-2, AND DETAIL TC-1 ON SHEET SC-12.

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

CURVE DATA TABLE

NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT	NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT	NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT
A	3600.18'	42°05'08"	2644.44'	1385.06'	K	3655.18'	2°17'54"	146.62'	73.32'	Q	3607.18'	0°21'52"	22.95'	11.47'
D	3553.18'	42°05'08"	2609.92'	1336.98'	M	3603.18'	3°28'42"	218.74'	109.40'	R	3647.18'	0°14'28"	15.34'	15.34'
H	3593.18'	20°28'06"	1283.63'	648.73'	N	3607.18'	6°59'55"	440.62'	220.58'	S	3608.18'	0°19'48"	20.78'	10.39'
I	3607.18'	15°06'18"	950.96'	478.26'	O	3647.18'	7°19'22"	466.14'	233.39'	T	35'	87°00'53"	53.15'	33.22'
J	3647.18'	11°18'22"	719.70'	361.02'	P	3593.18'	2°46'44"	174.27'	87.15'	U	35'	91°58'40"	56.19'	36.23'

CONSTRUCTION NOTES CONT.

(34) CONSTRUCT METAL HAND RAIL ON TOP OF PROPOSED CMU WALL PER SPPWC 606-4, TYPE B.

(97) CONSTRUCT TYPE 6A (CASE 1) CMU RETAINING WALL PER CALTRANS STANDARD PLAN B3-7A (DESIGN H=3'-4"). BLOCK AND COLOR TO MATCH EXISTING.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SCALE
HORIZ: 1"=40'
VERT: 1"=4'

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (SD) STORM DRAIN IMPROVEMENT (SEE GENERAL NOTES).
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (4) CONSTRUCT CURB RAMP PER CITY OF IRVINE STD. PLAN NO. 202.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (7) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE OVER 0' TO 0.64' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (10) CONSTRUCT 0.20' ARHM OVERLAY OVER 0.20' TO 0.50' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (11) CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- (12) CONSTRUCT PARABOLIC MEDIAN CURB FLARE PER CITY OF IRVINE STD. PLAN NO. 108 (L=100').
- (14) CONSTRUCT 4" THICK PCC MEDIAN PAVEMENT ON 4" MINIMUM THICKNESS SAND.
- (15) FALSE CURB BY OTHERS (WIDTH PER PLAN). SEE DETAIL 15 ON SHEET X-2.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (26) CONSTRUCT TYPE-B RETAINING CURB PER DETAIL 26 ON SHEET C-1 (H=3').
- (33) CONSTRUCT TYPE "B-6" RAISED MEDIAN NOSE CURB PER CITY OF IRVINE STD. PLAN NO. 110 & 200. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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2					
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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

RANDALL G. BERRY RCE #44642 — DATE 7/7/17

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

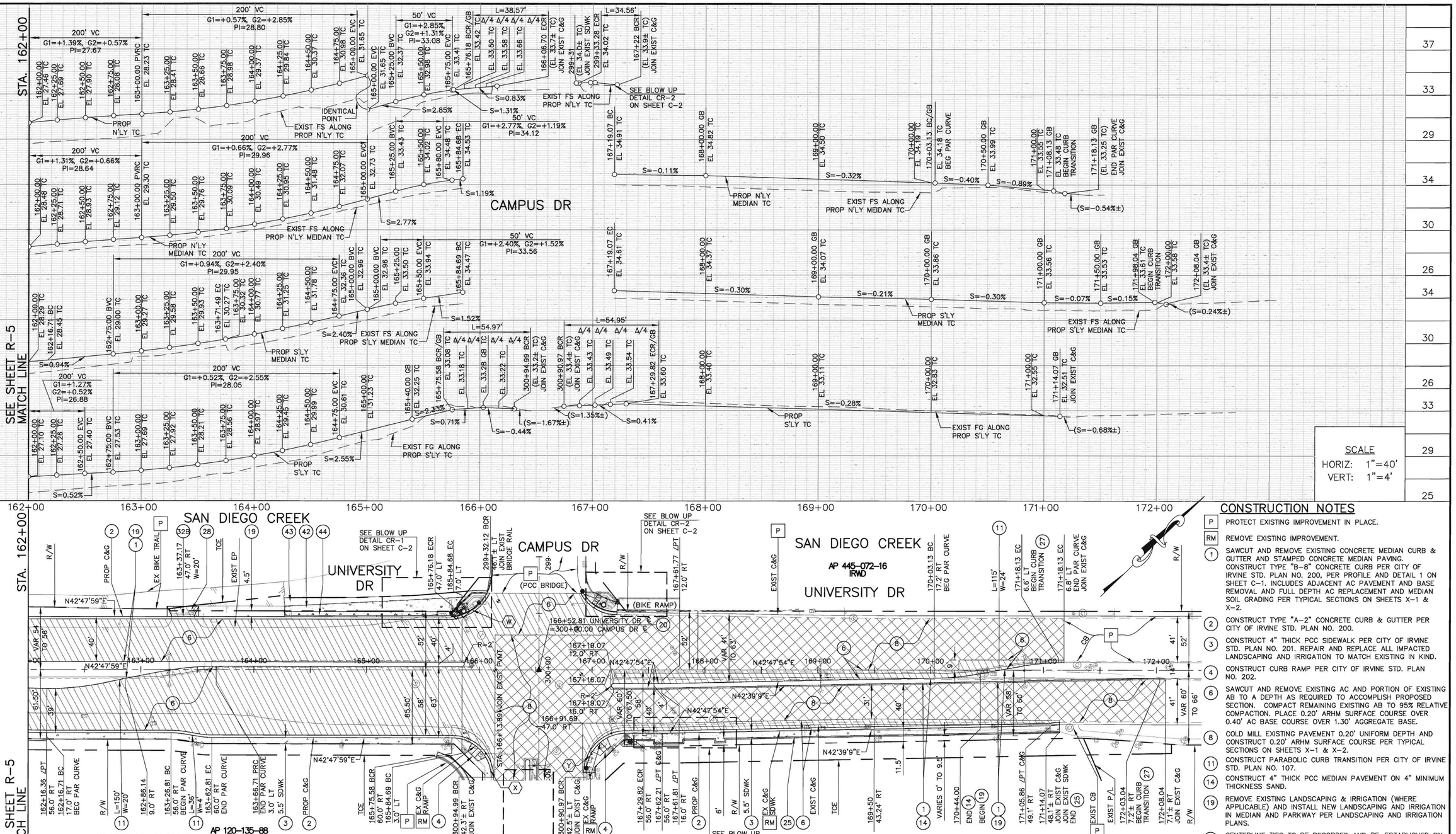
ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 152+00 TO 162+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

R-5

SHT 9 OF 87



GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

CURVE DATA TABLE

NO.	RADIUS	DELTA	LENGTH/DISTANCE	TANGENT
(W)	38.50'	57°24'12"	38.57'	21.08'
(X)	35'	89°59'29"	54.97'	34.99'
(Y)	35'	89°56'53"	54.95'	34.97'

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- COLD MILL AND PLACE AC PER CONSTRUCTION NOTE (8)
- PCC PER CONSTRUCTION NOTE (3) (4) (42)

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (RM) REMOVE EXISTING IMPROVEMENT.
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (4) CONSTRUCT CURB RAMP PER CITY OF IRVINE STD. PLAN NO. 202.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (8) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (11) CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- (14) CONSTRUCT 4" THICK PCC MEDIAN PAVEMENT ON 4" MINIMUM THICKNESS SAND.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (20) CENTERLINE TIES TO BE RECORDED AND RE-ESTABLISHED BY OTHERS. CONFIRM COMPLETE PRIOR TO IMPACTING.
- (25) CONSTRUCT TYPE-A RETAINING CURB PER DETAIL 25 ON SHEET C-1 (H=2').
- (27) CONSTRUCT CURB HEIGHT TRANSITION FROM 8" CURB FACE (TO JOIN EXISTING 6" MEDIAN CURB)

CONSTRUCTION NOTES CONT.

- (28) SAWCUT, REMOVE EXISTING AND CONSTRUCT 0.33 AC SURFACE COURSE OVER 0.50' AB. MAINTENANCE ACCESS ROAD.
- (32B) CONSTRUCT DEPRESSED CURB & GUTTER PER IRVINE STD. PLAN NO. 204 TYPE I-A AND DETAIL 32B ON SHEET C-1.
- (42) CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING WITH #4 REBAR AT 12" O.C. IN BOTH DIRECTIONS PER SECTION A-A ON SHEET C-2.
- (43) REMOVE EXISTING AC PAVEMENT AND CONSTRUCT 4" THICK AC PAVEMENT ON COMPACTED EXISTING SUBGRADE.
- (44) INSTALL NEW GUARD RAILING PER CITY OF IRVINE STD 401.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

811 Know what's below Call before you dig

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/1/17
RANDALL G. BERRY RCE #44642 DATE

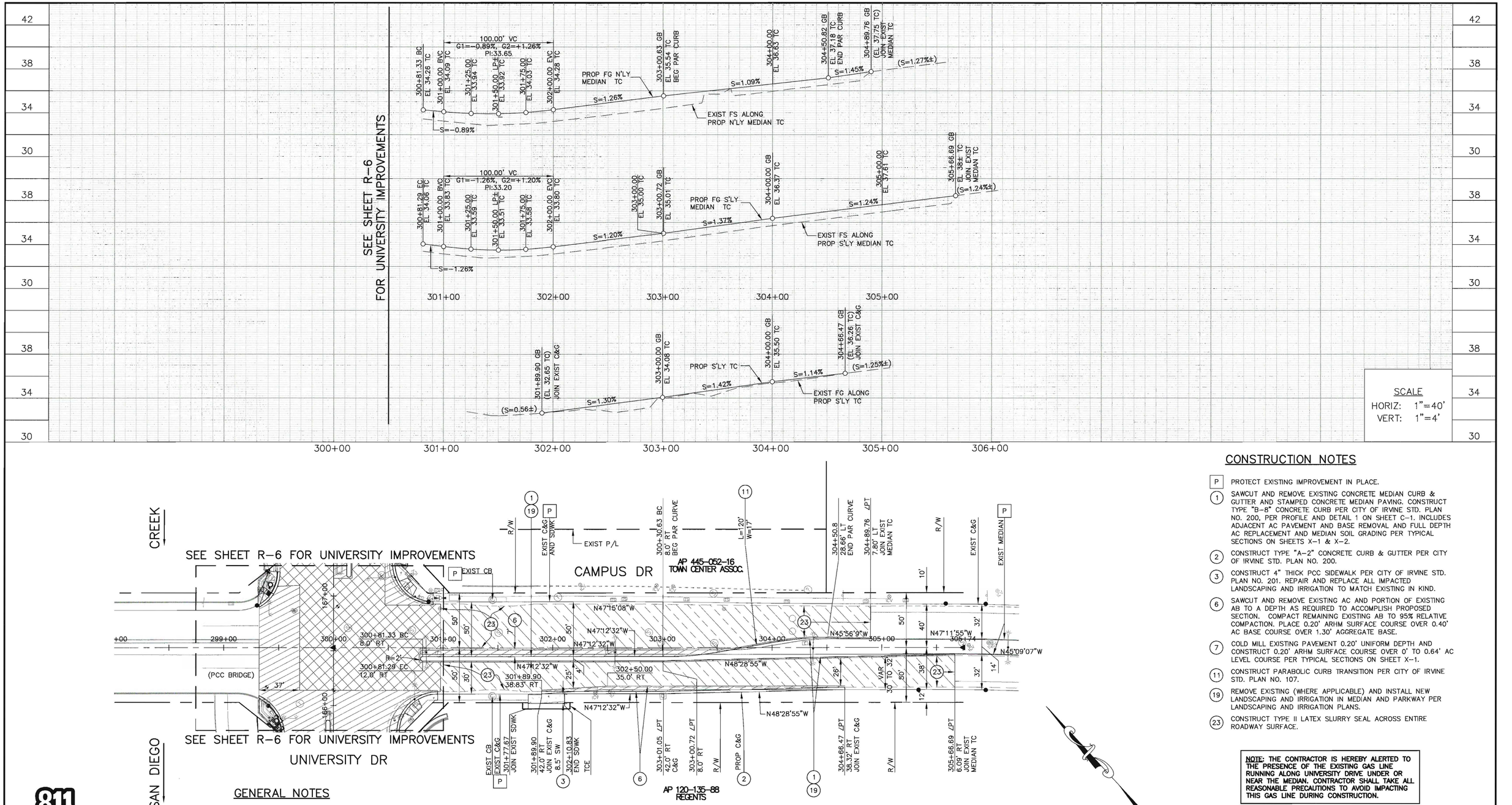
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 162+00 TO 172+08.04
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

R-6
SHT 10 OF 87



SCALE
HORIZ: 1"=40'
VERT: 1"=4'

CONSTRUCTION NOTES

- [P] PROTECT EXISTING IMPROVEMENT IN PLACE.
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B-8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C-1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEETS X-1 & X-2.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (7) COLD MILL EXISTING PAVEMENT 0.20' UNIFORM DEPTH AND CONSTRUCT 0.20' ARHM SURFACE COURSE OVER 0' TO 0.64' AC LEVEL COURSE PER TYPICAL SECTIONS ON SHEET X-1.
- (11) CONSTRUCT PARABOLIC CURB TRANSITION PER CITY OF IRVINE STD. PLAN NO. 107.
- (19) REMOVE EXISTING (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (23) CONSTRUCT TYPE II LATEX SLURRY SEAL ACROSS ENTIRE ROADWAY SURFACE.

NOTE: THE CONTRACTOR IS HEREBY ALERTED TO THE PRESENCE OF THE EXISTING GAS LINE RUNNING ALONG UNIVERSITY DRIVE UNDER OR NEAR THE MEDIAN. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO AVOID IMPACTING THIS GAS LINE DURING CONSTRUCTION.

811 Know what's below Call before you dig

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR ROADWAY CONSTRUCTION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
3. FOR DISPOSITION OF TOPOGRAPHIC FEATURES AND EXISTING UTILITIES, SEE UTILITY DISPOSITION PLANS U-1 TO U-3.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING PLANS LP-1 TO LP-12 AND IRRIGATION PLANS LI-1 TO LI-14.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-6.
6. SEE SPECIFICATIONS FOR TREE REMOVALS.

LEGEND

- AC/AB PAVEMENT PER CONSTRUCTION NOTE (6)
- TYPE II LATEX SLURRY SEAL PER CONSTRUCTION NOTE (23)
- PCC PER CONSTRUCTION NOTE (3)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
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PHONE: (949) 655-3900 ● FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

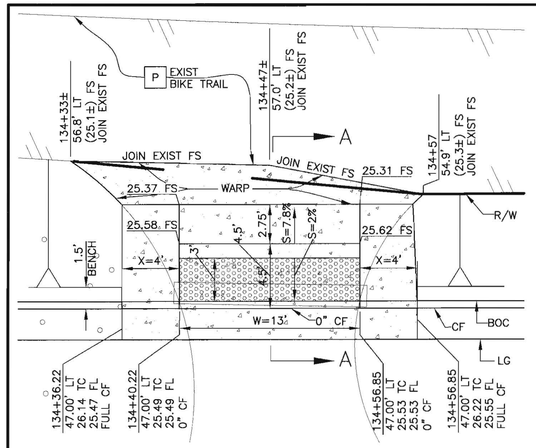
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DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

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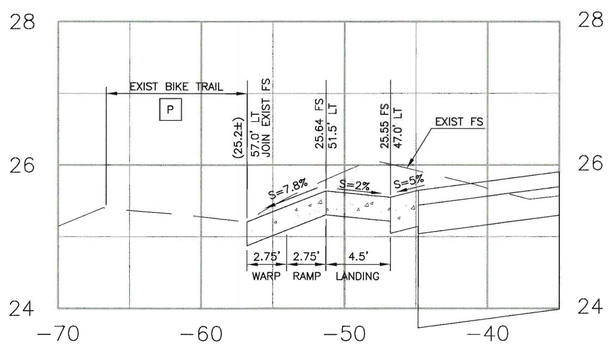
ROADWAY PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
CAMPUS DR
STA 300+81.29 TO 305+66.69
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

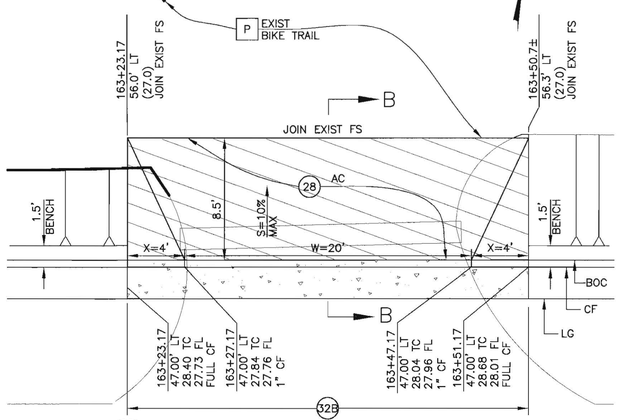
R-7
SHT 11 OF 87



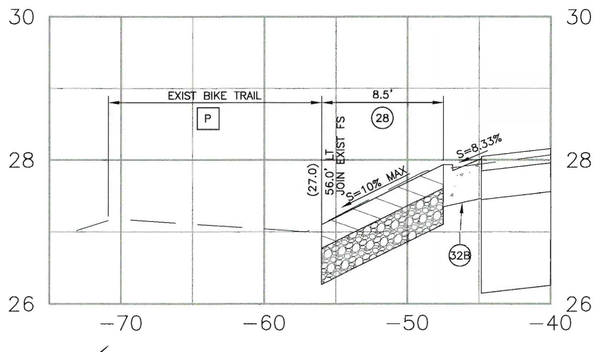
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STA 134+46.53 (CALIFORNIA AVE)
SCALE 1" = 5'



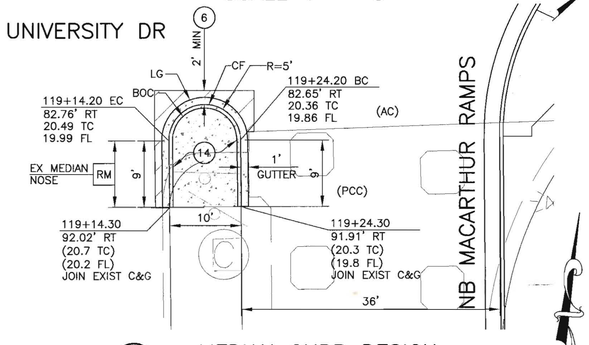
SECTION A–A
STA 134+46.53
HORIZ SCALE 1" = 5'
VERT SCALE 1" = 1'



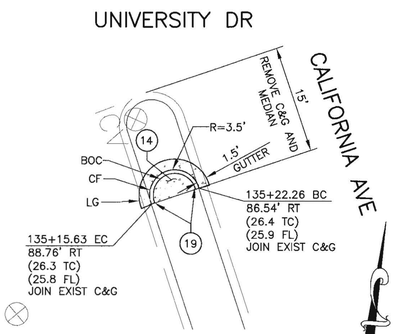
32B MODIFIED DWY RAMP DETAIL
STA 163+37.17
SCALE 1" = 5'



SECTION B–B (MAINTENANCE ACCESS
STA 163+37.17 DWY W/O CAMPUS)
HORIZ SCALE 1" = 5'
VERT SCALE 1" = 1'



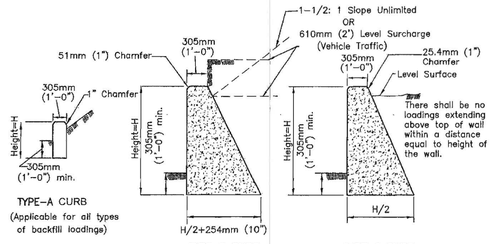
24 MEDIAN CURB DESIGN
UNIVERSITY DRIVE AND
NB MACARTHUR RAMPS
SCALE 1" = 10'

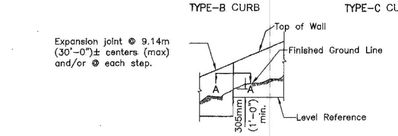


24 MEDIAN CURB DESIGN
UNIVERSITY DRIVE AND
CALIFORNIA AVE
SCALE 1" = 10'

LEGEND
AC/AB PAVEMENT PER CONSTRUCTION NOTE (28)
PCC PER CONSTRUCTION NOTES (24) (32A) (32B)

*NOTE: OFFSET MEASURED FROM UNIVERSITY ℄





ELEVATION

CURB TYPE	HEIGHT	BASE	CONCRETE CU M – CF/FT
A	457mm (1'–6")	305mm (1'–0")	.042 cu m (1.50 cu ft.)
	610mm (2'–0")	305mm (1'–0")	.057 cu m (2.00 cu ft.)
B	914mm (3'–0")	711mm (2'–4")	1.41 cu m (4.99 cu ft.)
	1.22m (4'–0")	864mm (2'–10")	.217 cu m (7.66 cu ft.)
	1.52m (5'–0")	1.02m (3'–4")	.306 cu m (10.82 cu ft.)
	1.83m (6'–0")	1.17m (3'–10")	.410 cu m (14.49 cu ft.)
C	914mm (3'–0")	457mm (1'–8")	.106 cu m (3.75 cu ft.)
	1.22m (4'–0")	610mm (2'–0")	.170 cu m (6.00 cu ft.)
	1.52m (5'–0")	762mm (2'–6")	.248 cu m (8.75 cu ft.)
	1.83m (6'–0")	914mm (3'–0")	.340 cu m (12.00 cu ft.)

CONCRETE
Concrete shall be 332 kg/M³ –C–22Mpa (560–C–3250)

DESIGN CONDITIONS
Walls are to be used for the loading conditions shown for each type wall. Design H may be exceeded by six inches before going to next size.

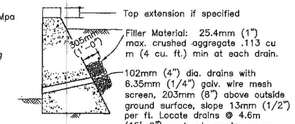
DESIGN DATA
Fc = 8.3 Mpa (1200 psi)
F'c = 20.7 Mpa (3000 psi)
Earth = 1922 kg/cu m (120 pcf) and equivalent fluid pressure = 176 kg/sq m (36 psf) per 305mm (foot) of height

Walls shown for 1–1/2:1 unlimited sloping surcharge are designed in accordance with Rankine's Formula for unlimited sloping surcharge with ϕ = 33° 13m (42').
Note: Maximum toe pressure under wall footing = 143.6 Kpa (1–1/2 tons/sq. ft.). Special design required where footing material is incapable of supporting this pressure.

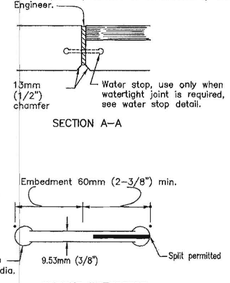
EXCAVATION AND BACKFILL
Compaction of backfill material by jetting or ponding with water will not be permitted.

Each layer of backfill shall be moistened as directed by the Engineer and thoroughly tamped, rolled or otherwise compacted until the relative compaction is not less than 90 percent.

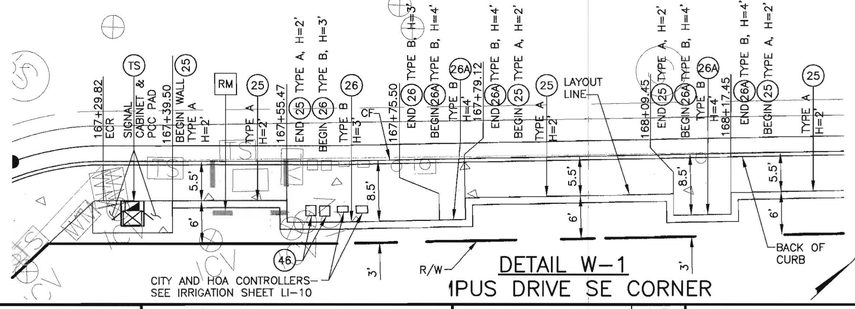
No backfill material shall be deposited against concrete retaining walls until the concrete has developed a strength of 17 Mpa (2,500 psi) in compression as determined by test cylinders, or until 28 days after wall has been placed.



TYPICAL DRAINAGE
WHEN H IS GREATER THAN 1.22m (4'–0")



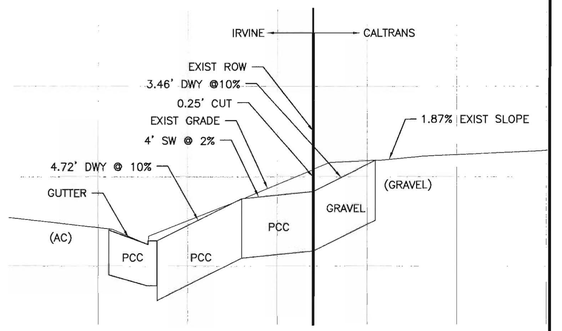
25 26 26A RETAINING CURB DETAIL
NOT TO SCALE



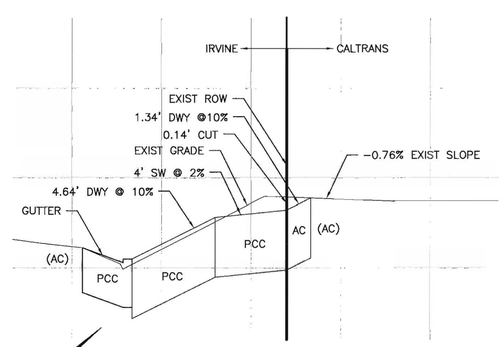
DETAIL W–1
IPUS DRIVE SE CORNER

CONSTRUCTION NOTES:

- P PROTECT EXISTING IMPROVEMENT IN PLACE.
- RM REMOVE EXISTING IMPROVEMENT.
- (1) SAWCUT AND REMOVE EXISTING CONCRETE MEDIAN CURB & GUTTER AND STAMPED CONCRETE MEDIAN PAVING. CONSTRUCT TYPE "B–8" CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, PER PROFILE AND DETAIL 1 ON SHEET C–1. INCLUDES ADJACENT AC PAVEMENT AND BASE REMOVAL AND FULL DEPTH AC REPLACEMENT AND MEDIAN SOIL GRADING PER TYPICAL SECTIONS ON SHEET X–1.
- (14) CONSTRUCT 4" THICK PCC MEDIAN PAVEMENT ON 4" MINIMUM THICKNESS SAND.
- (19) REMOVE EXISTING LANDSCAPING & IRRIGATION (WHERE APPLICABLE) AND INSTALL NEW LANDSCAPING AND IRRIGATION IN MEDIAN AND PARKWAY PER LANDSCAPING AND IRRIGATION PLANS.
- (22) CONSTRUCT DRIVEWAY PER IRVINE STD. PLAN NO. 204 TYPE I–A. SEE DW DETAILS ON SHEET C–1 FOR DRIVEWAY PROFILES.
- (24) CONSTRUCT MODIFIED TYPE "D" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200 AND DETAIL 24 ON SHEET C–1. INCLUDES 12" WIDE / 8" DEEP ADJACENT AC PAVEMENT REMOVAL AND REPLACEMENT.
- (25) CONSTRUCT TYPE–A RETAINING CURB PER DETAIL 25 ON SHEET C–1 (H=2').
- (26) CONSTRUCT TYPE–B RETAINING CURB PER DETAIL 26 ON SHEET C–1 (H=3').
- (26A) CONSTRUCT TYPE–B RETAINING CURB PER DETAIL 26A ON SHEET C–1 (H=4').
- (28) SAWCUT, REMOVE EXISTING AND CONSTRUCT 0.33 AC SURFACE COURSE OVER 0.50' AB. MAINTENANCE ACCESS ROAD.
- (32A) CONSTRUCT MODIFIED DRIVEWAY/RAMP PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I–A AND DETAIL 32A ON SHEET C–1.
- (32B) CONSTRUCT DEPRESSED CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 204 TYPE I–A AND DETAIL 32B ON SHEET C–1.
- (46) RELOCATE IRRIGATION METER PER SHEETS C–1 AND U–3.
- (TS) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLAN



DETAIL DW–1 (22)
STA 114+66



DETAIL DW–2 (22)
STA 117+73

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655–3900 ● FAX: (949) 655–3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

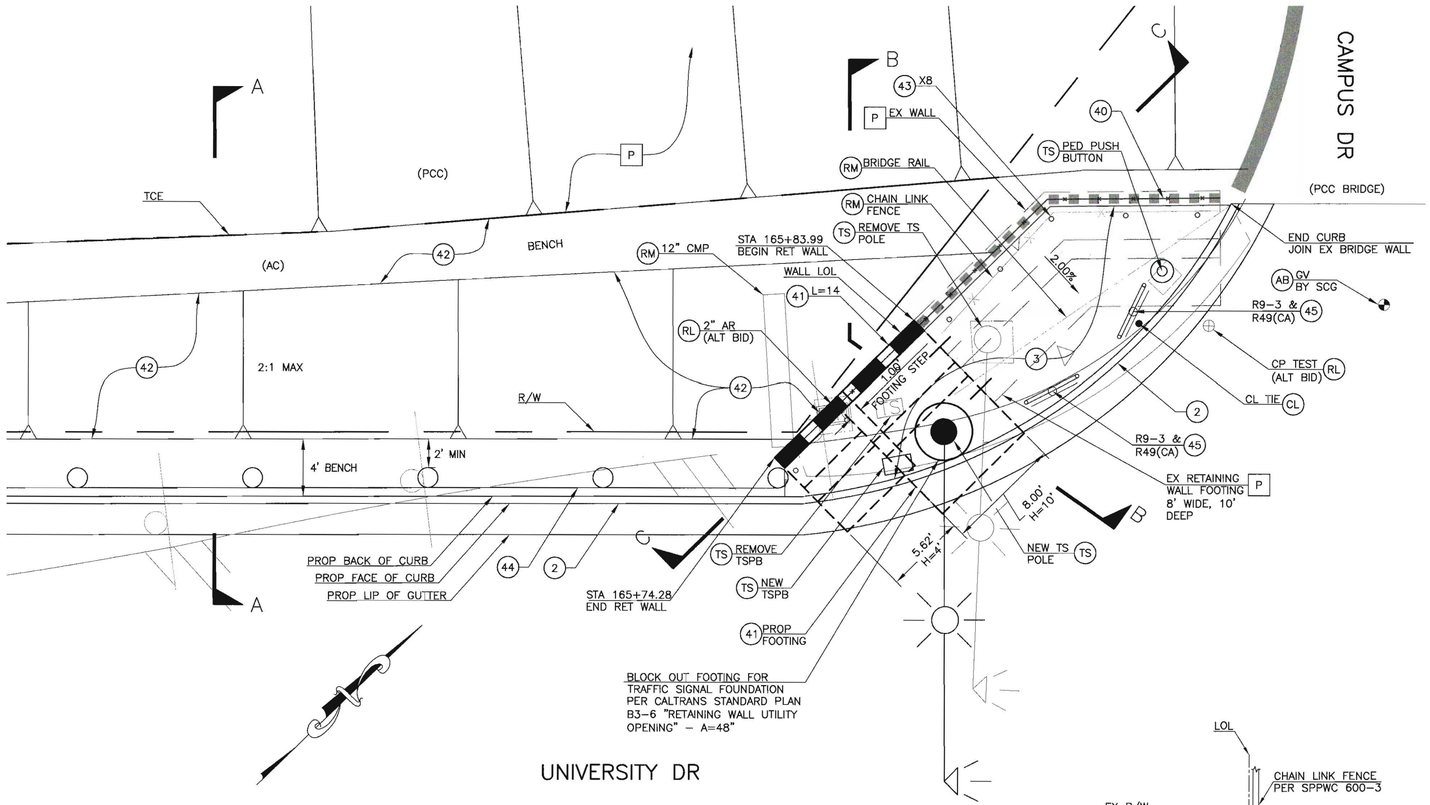
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

IRWD CODE 6788 C.I.P. NO. 311306

CONSTRUCTION DETAILS
UNIVERSITY DRIVE WIDENING
ROADWAY CONSTRUCTION DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

C–1
SHT 12 OF 87



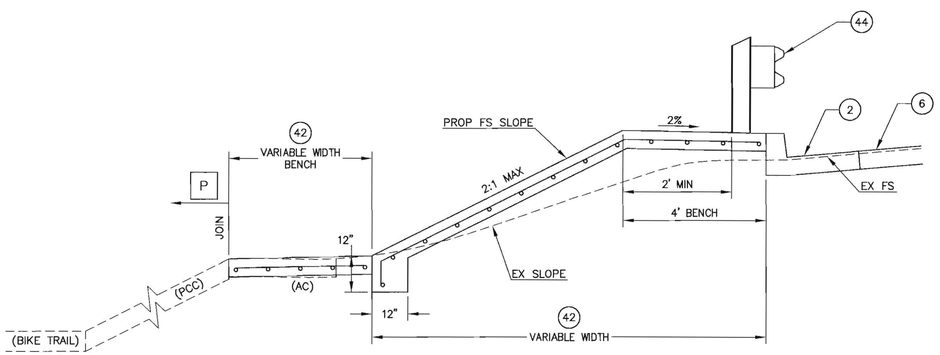
UNIVERSITY DR

GRAPHIC SCALE

5 0 2.5 5 10 20

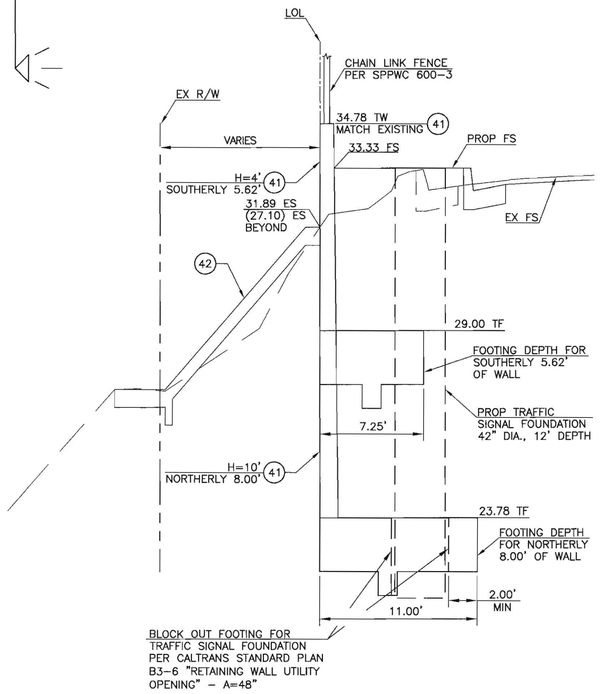
(IN FEET)
1 inch = 5 ft.

DETAIL CR-1
CAMPUS DRIVE NW CORNER

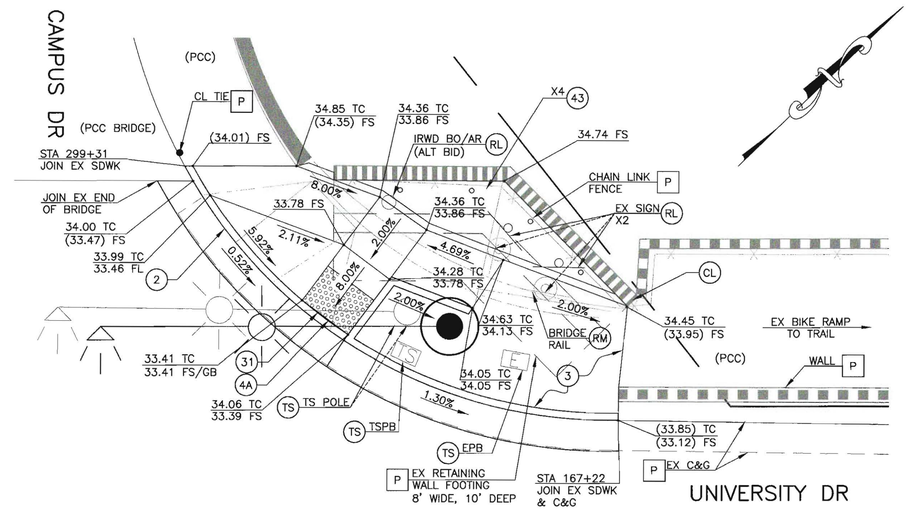


SECTION A-A
APPLIES FROM STA 164+27 TO 165+84.68

NOT TO SCALE



SECTION B-B (WALL SECTION)
HORIZ. SCALE: 1"=5'
VERT. SCALE: 1"=2'

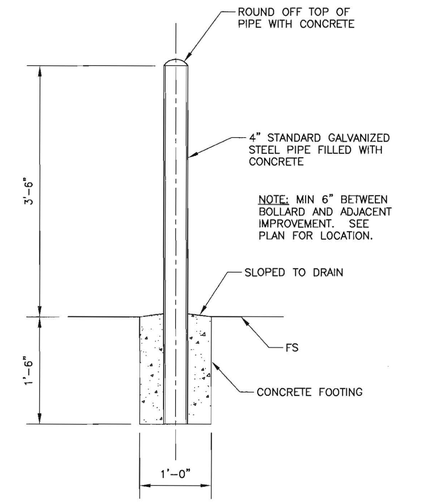


DETAIL CR-2
CAMPUS DRIVE NE CORNER

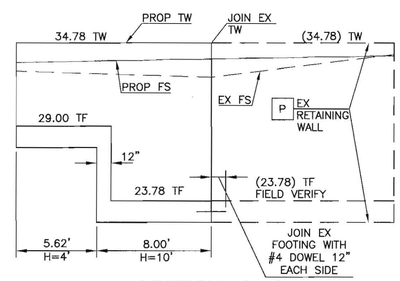
GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.



DETAIL 43
NOT TO SCALE



SECTION C-C
HORIZ. SCALE: 1"=5'
VERT. SCALE: 1"=5'

CONSTRUCTION NOTES:

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (A) ADJUST TO GRADE (IMPROVEMENT TYPE SHOWN ON PLAN).
- (AB) ADJUST TO GRADE BY OTHERS (IMPROVEMENT TYPE AND OWNER SHOWN ON PLAN).
- (CL) RESET CENTER LINE MONUMENT AND/OR CENTER LINE TIE PER ROADWAY PLANS.
- (RL) RELOCATE EXISTING IMPROVEMENT (TYPE PER PLAN) BY CONTRACTOR UNLESS NOTED OTHERWISE TO BE PERFORMED BY UTILITY OWNER.
- (RM) REMOVE EXISTING IMPROVEMENT (TYPE PER PLAN). PLACE COMPACTED BACKFILL AS NEEDED TO FILL REMAINING VOIDS.
- (TS) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLANS.
- (2) CONSTRUCT TYPE "A-2" CONCRETE CURB & GUTTER PER CITY OF IRVINE STD. PLAN NO. 200.
- (3) CONSTRUCT 4" THICK PCC SIDEWALK PER CITY OF IRVINE STD. PLAN NO. 201. REPAIR AND REPLACE ALL IMPACTED LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN KIND.
- (4A) CONSTRUCT CUSTOM CURB RAMP PER DETAIL CR-2 ON SHEET C-2 WITH RETAINING CURB AT BACK OF RAMP.
- (6) SAWCUT AND REMOVE EXISTING AC AND PORTION OF EXISTING AB TO A DEPTH AS REQUIRED TO ACCOMPLISH PROPOSED SECTION. COMPACT REMAINING EXISTING AB TO 95% RELATIVE COMPACTION. PLACE 0.20' ARHM SURFACE COURSE OVER 0.40' AC BASE COURSE OVER 1.30' AGGREGATE BASE.
- (31) INSTALL "SURFACE APPLIED" DETECTABLE WARNING SURFACE, COLOR "BLACK" PER CITY OF IRVINE STD. PLAN NO. 202.
- (40) CONSTRUCT 5' HIGH CHAIN LINK FENCE ON TOP OF EXISTING WALL PER SPPWC 600-3.
- (41) CONSTRUCT TYPE 5, CASE 1 REINFORCED CONCRETE RETAINING WALL PER CALTRANS STD B3-4A, AND PER SECTION B-B ON SHEET C-2, WITH 5' HIGH CHAIN LINK FENCE ON TOP PER SPPWC 600-3. JOIN EX. WALL WITH DOWELS (#4 @ 12" O.C.).
- (42) CONSTRUCT 6" THICK REINFORCED CONCRETE SLOPE PAVING WITH #4 REBAR AT 12" O.C. IN BOTH DIRECTIONS PER SECTION A-A ON SHEET C-2.
- (43) CONSTRUCT BOLLARDS AT 5' ON CENTER PER DETAIL 43 ON SHEET C-2.
- (44) INSTALL NEW GUARD RAILING ON METAL POSTS PER CITY OF IRVINE STD 401.

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NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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1					

REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates Inc.
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

CONSTRUCTION DETAILS
UNIVERSITY DRIVE WIDENING
CURB RAMP DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00663284-EMC

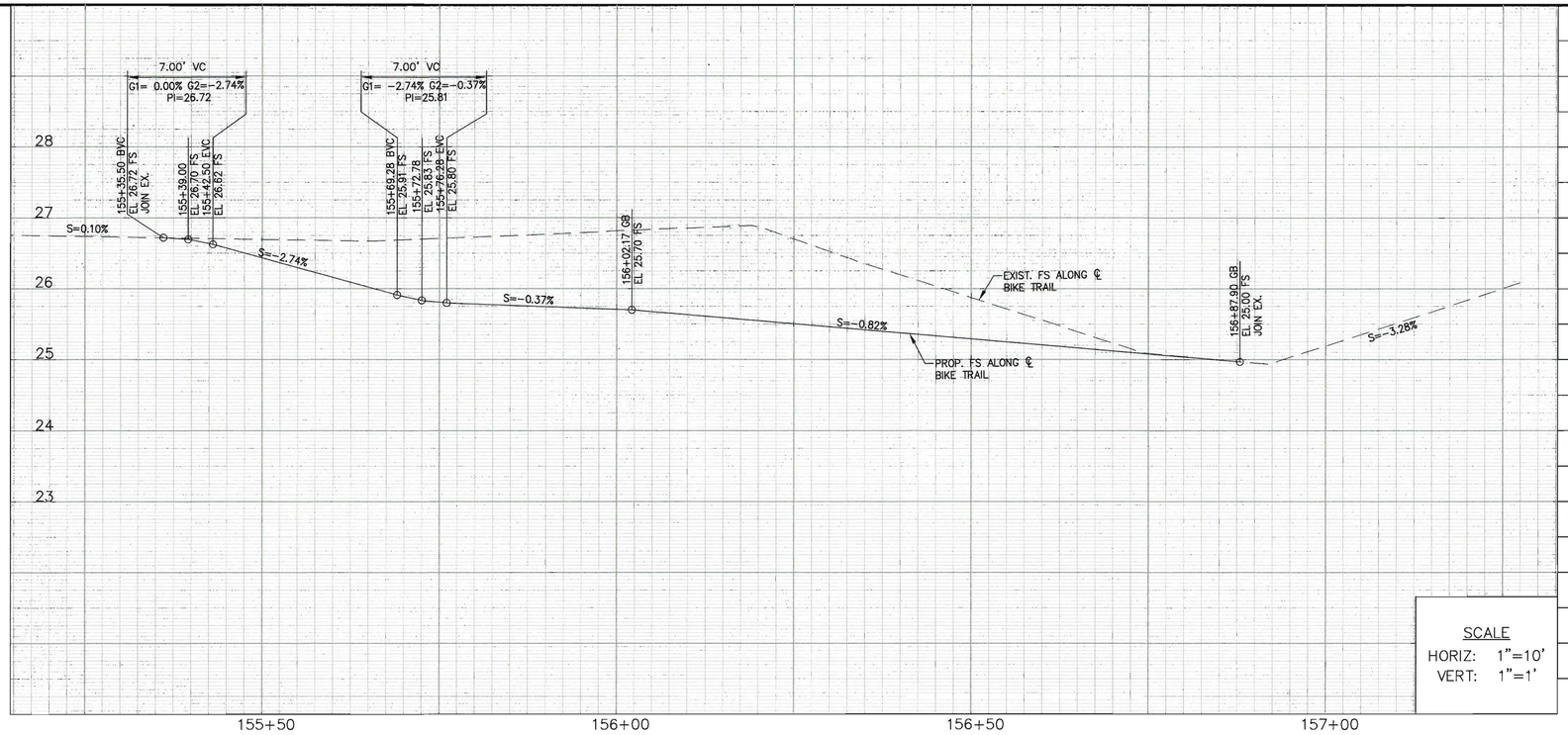
C-2
SHT 13 OF 87

GENERAL NOTES:

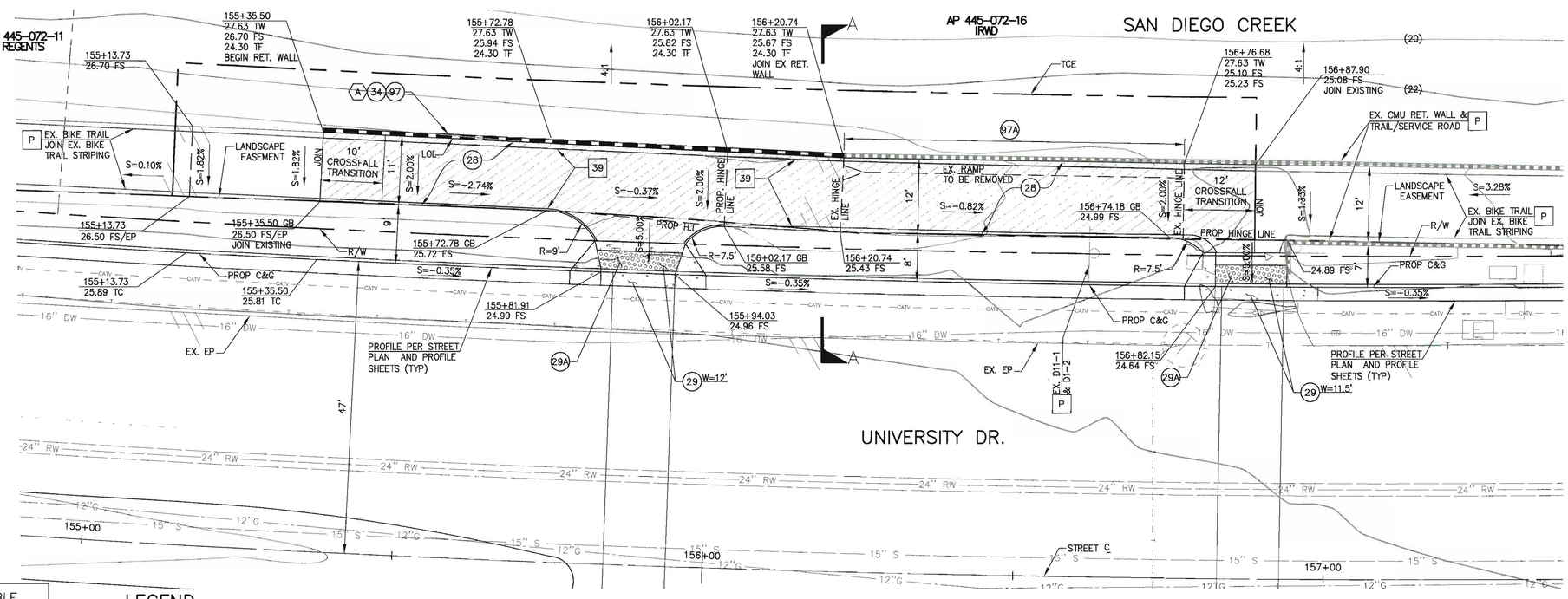
1. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
2. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO THE STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
3. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
4. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND OTHER POLLUTANTS.
5. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
6. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED OF IN TRASH OR RECYCLE BINS.
7. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT OR THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
8. DISCHARGING CONTAMINATED GROUNDWATER IS PROHIBITED. DISCHARGING OF NON-CONTAMINATED GROUNDWATER BY DEWATERING SHALL COMPLY WITH REQUIREMENTS OF APPLICABLE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS AS FOLLOWS: FOR PROJECTS WITHIN THE SANTA ANA REGION AND SAN DIEGO CREEK/NEWPORT BAY WATERSHED, PERMIT NO. CAG918002, ORDER R8-2007-0041 AND AMENDING ORDER R8-2014-0025 ISSUED BY THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD. FOR OTHER PROJECTS WITHIN THE SANTA ANA REGION, PERMIT NO. CAG998001, ORDER R8-2015-0004 ISSUED BY THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD. FOR PROJECTS WITHIN THE SAN DIEGO REGION, PERMIT NO. CAG919002, ORDER NO. R9-2008-0002 ISSUED BY THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD. THESE THREE PERMITS MAY BE UPDATED AT ANY TIME DURING THE TERM OF PROJECT. ANY INDICATION OR EVIDENCE OF WATER QUALITY THAT DOES NOT MEET REQUIRED STANDARDS WILL BE REPORTED TO OC PUBLIC WORKS/WATER QUALITY COMPLIANCE AT (877) 89-SPILL.

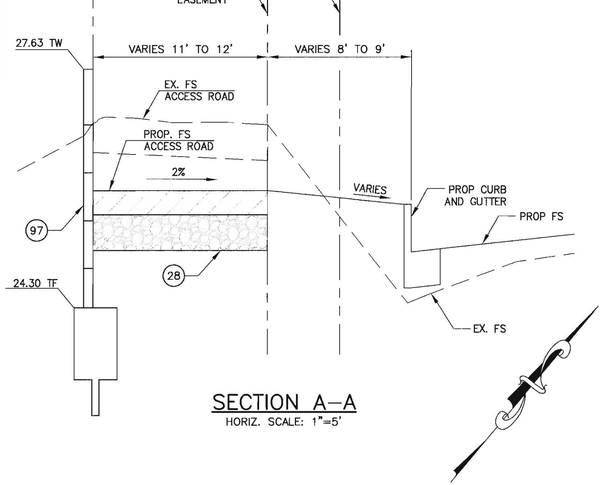
CONSTRUCTION NOTES:

- [P] PROTECT EXISTING IMPROVEMENT IN PLACE.
- (28) SAWCUT, REMOVE EXISTING AND CONSTRUCT 0.33' AC SURFACE COURSE OVER 0.50' AB MAINTENANCE ACCESS ROAD.
- (29) CONSTRUCT DRIVEWAY PER IRVINE STD. PLAN NO. 205 TYPE II-B.
- (29A) INSTALL 12' X 3' CAST-IN-PLACE DETECTABLE WARNING SURFACE, COLOR ONYX BLACK PER CITY OF IRVINE STD. PLAN NO 202.
- (34) CONSTRUCT METAL HAND RAIL ON TOP OF PROPOSED CMU WALL PER SPPWC 606-4, TYPE B.
- (97) CONSTRUCT TYPE 6A (CASE 1) CMU RETAINING WALL PER CALTRANS STANDARD PLAN B3-7A (DESIGN H=3'-4"). BLOCK AND COLOR TO MATCH EXISTING.
- (97A) MODIFY FS IN FRONT OF WALL PER ELEVATIONS ON PLAN AND MAINTAIN 12" MINIMUM COVER OVER EXISTING FOOTING. FIELD CONFIRM EXISTING FOOTING DEPTH PRIOR TO REMOVAL. CLEAN NEWLY EXPOSED WALL FACE.
- [39] INSTALL PAINTED 6-INCH WIDE WHITE BIKE LANE LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39.



SCALE
HORIZ: 1"=10'
VERT: 1"=1'





SECTION A-A
HORIZ. SCALE: 1"=5'

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

LINE DATA TABLE

NO.	BEARING	LENGTH
A	S53°01'31"W	83.90'

LEGEND
- AC SURFACE COURSE MAINTENANCE ACCESS ROAD RECONSTRUCTION PER CONSTRUCTION NOTE (28)
- AB PAVEMENT MAINTENANCE ACCESS ROAD RECONSTRUCTION PER CONSTRUCTION NOTE (28)

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

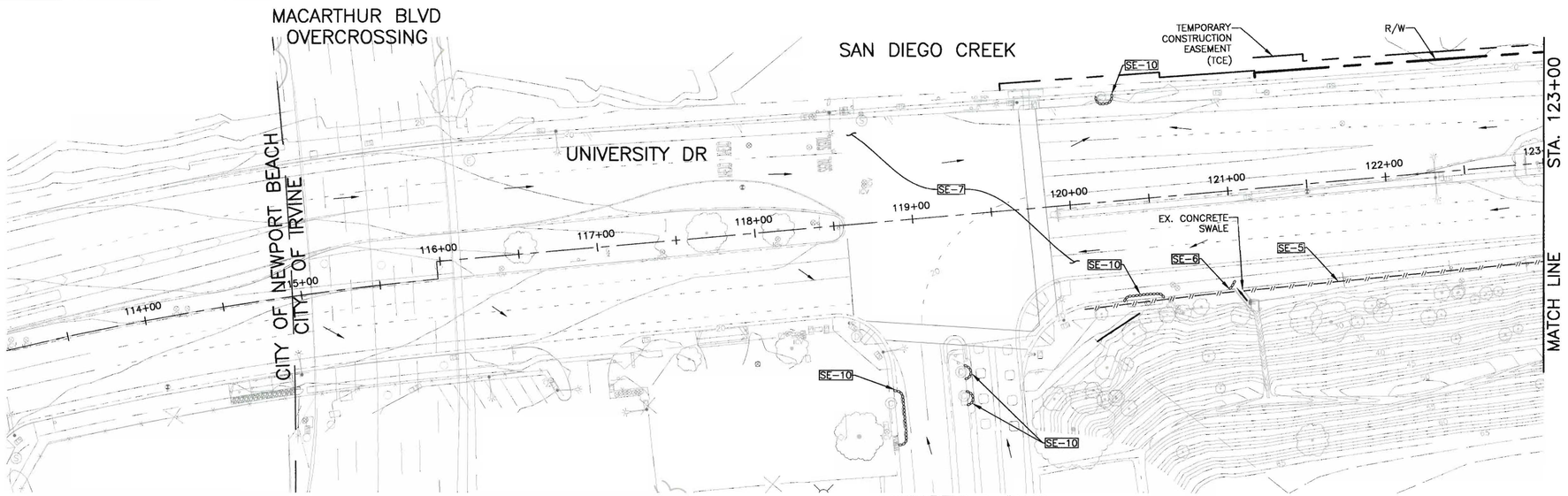
IRWD CODE 6788 | C.I.P. NO. 311306

CONSTRUCTION DETAILS
UNIVERSITY DRIVE WIDENING
SAN DIEGO CREEK BIKE TRAIL/SERVICE ROAD DETAIL

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

C-3
SHT 14 OF 87

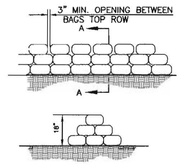


LEGEND:

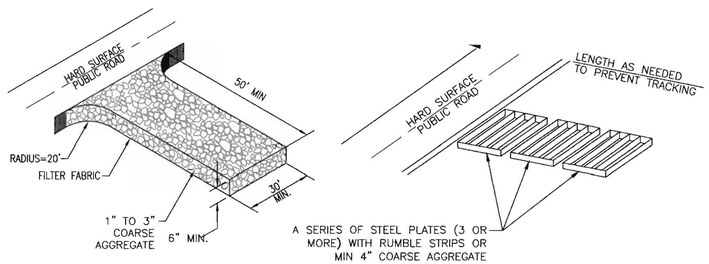
- DIRECTION OF FLOW
- FIBER ROLLS (SE-5)
- GRAVEL BAG BERM (SE-6)
- SE-7 STREET SWEEPING AND VACUUMING (SE-7)
- STORM DRAIN INLET PROTECTION (SE-10)

EROSION AND SEDIMENT CONTROL REQUIREMENTS

REQUIREMENTS	SPECIFIED BMPs BMP DETAIL(S)/ SHEET NUMBER
A. WIND EROSION BMPS (DUST CONTROL) SHALL BE IMPLEMENTED.	SHEETS 1, 2, 3
B. SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AT THE SITE PERIMETER, AT ALL OPERATIONAL STORM DRAIN INLETS AND AT ALL NON-ACTIVE SLOPES.	SHEETS 1, 2, 3
C. BMPS TO CONTROL OFF-SITE SEDIMENT TRACKING SHALL BE IMPLEMENTED AND MAINTAINED.	SHEETS 1, 2, 3
D. APPROPRIATE WASTE MANAGEMENT AND MATERIAL POLLUTION CONTROL BMPS SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER BY WASTES AND CONSTRUCTION MATERIALS.	SHEETS 1, 2, 3
E. APPROPRIATE NON-STORMWATER BMPS SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER FROM CONSTRUCTION ACTIVITIES.	SHEETS 1, 2, 3
F. ADEQUATE PHYSICAL OR VEGETATION EROSION CONTROL BMPS (TEMPORARY OR PERMANENT) SHALL BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES. IF A SELECTED BMP FAILS, IT MUST BE REPAIRED AND IMPROVED, OR REPLACED WITH AN ACCEPTABLE ALTERNATE AS SOON AS IT IS SAFE TO DO SO. THE FAILURE OF A BMP MAY INDICATE THAT THE BMP, AS INSTALLED, WAS NOT ADEQUATE FOR THE CIRCUMSTANCES IN WHICH IT WAS USED. REPAIRS OR REPLACEMENTS MUST RESULT IN A MORE ROBUST BMP, OR ADDITIONAL BMPS SHOULD BE INSTALLED TO PROVIDE ADEQUATE PROTECTION.	SHEETS 1, 2, 3
G. ADEQUATE EROSION AND SEDIMENT CONTROLS MUST BE IMPLEMENTED PRIOR TO THE ONSET OF A STORM EVENT FOR ALL ACTIVELY GRADED AREAS.	SHEETS 1, 2, 3
H. A DISTURBED AREA THAT IS NOT COMPLETED BUT THAT IS NOT BEING ACTIVELY GRADED (NON-ACTIVE AREA) SHALL BE FULLY PROTECTED FROM EROSION WITH THE REFERENCED TEMPORARY AND/OR PERMANENT BMPS (EROSION AND SEDIMENT CONTROL). THE ABILITY TO DEPLOY STANDBY BMP MATERIALS IS NOT SUFFICIENT FOR THESE AREAS. EROSION AND SEDIMENT CONTROL BMPS MUST ACTUALLY BE DEPLOYED. THIS INCLUDES ALL BUILDING PADS, UNFINISHED ROADS AND SLOPES.	SHEETS 1, 2, 3
I. SUFFICIENT MATERIALS NEEDED TO INSTALL REFERENCED STANDBY EROSION AND SEDIMENT CONTROL BMPS NECESSARY TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGES SHALL BE STORED ON SITE. AREAS THAT HAVE ALREADY BEEN PROTECTED FROM EROSION USING PERMANENT PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION BMPS ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.	SHEETS 1, 2, 3

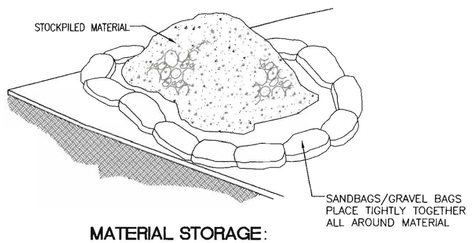


SE-6 GRAVEL BAG BARRIER



TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT

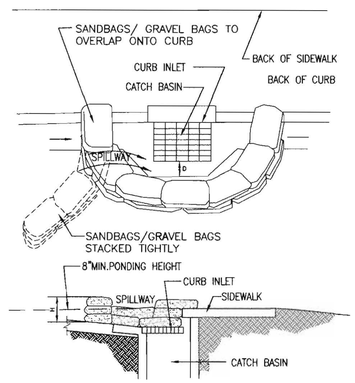
TO BE PLACED AT ALL ENTRY AND EXIT LOCATIONS



MATERIAL STORAGE:

1. DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORM DRAIN SYSTEM.
2. ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

WM-3 STOCKPILE MANAGEMENT



SE-10 STORM DRAIN INLET PROTECTION

EROSION AND SEDIMENT CONTROL NOTES:

SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON-SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.

WASTE AND MATERIALS MANAGEMENT CONTROL NOTES:

APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS) FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED AND RETAINED ON-SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) NOTES:

1. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON-SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
2. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
3. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
4. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND OTHER POLLUTANTS.
5. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
6. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
7. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.
8. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING.

   DURING CONSTRUCTION, PERMITTEE SHALL DISPOSED OF SUCH MATERIALS IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGION WATER QUALITY CONTROL BOARD.
10. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES.
11. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
12. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
13. THE PERMITTEE SHALL NOTIFY ALL GENERAL CONTRACTORS, SUBCONTRACTORS, MATERIAL SUPPLIERS, LESSEES, AND PROPERTY OWNERS: THAT DUMPING OF CHEMICALS INTO THE STORM DRAIN SYSTEM OR THE WATERSHED IS PROHIBITED.
14. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
15. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 50%.
16. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON-SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
17. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED AND RETAINED ON-SITE TO MINIMIZE TRANSPORT FROM THE SITES TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.

NOTES:

1. SEDIMENTS AND OTHER MATERIALS SHALL BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC, THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:

A. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE RD OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
B. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH, & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.

3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE:

1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

POLLUTION PREVENTION NOTES:

IN ORDER TO MEET THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM FOR CONSTRUCTION, CONSTRUCTION CONTRACTORS SHALL INSTALL AND MAINTAIN APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS), AS SHOWN IN THE EROSION AND SEDIMENT CONTROL PLAN, ON ALL CONSTRUCTION PROJECTS. BMPS SHALL BE INSTALLED IN ACCORDANCE WITH INDUSTRY RECOMMENDED STANDARDS, AND/OR IN ACCORDANCE WITH ANY GENERAL CONSTRUCTION PERMIT ISSUED BY THE STATE FOR THE PROJECT TO PREVENT ANY DISCHARGES FROM THE PROJECT SITE OR INTO ANY STORM DRAIN FACILITIES. ALL SEDIMENTS, CONSTRUCTION MATERIALS, DEBRIS AND WASTES, AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, WIND, OR VEHICLE TRACKING. UNDER DIRECTION OF THE ENGINEER OF RECORD, EROSION AND/OR SEDIMENT CONTROL DEVICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
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3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER VIKRAM BAPNA No. C 52060 Exp. 12/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
CWE
1561 E. ORANGETHORPE AVE., SUITE 240
FULLERTON, CA 92831
TEL (714) 526-7500
www.cwecorp.com
VIKRAM BAPNA RCE #52060 7/7/2017 DATE

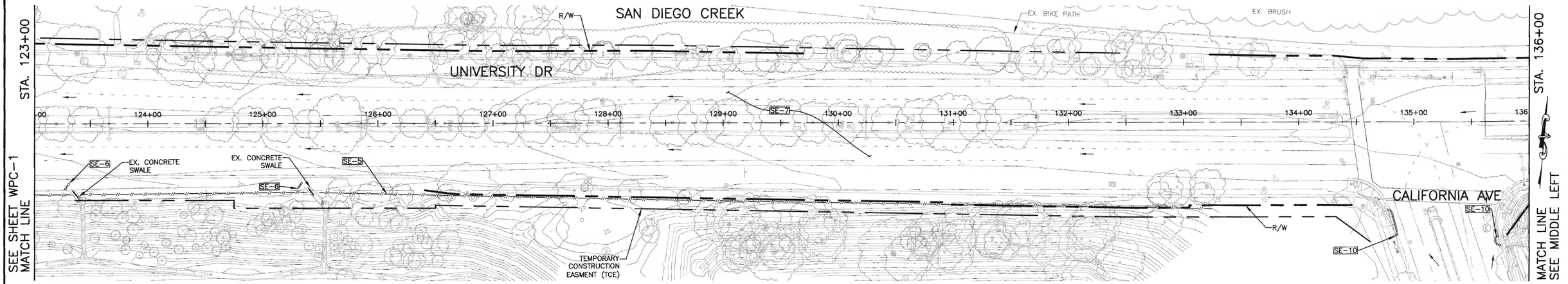
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RECOMMENDED BY:		DATE

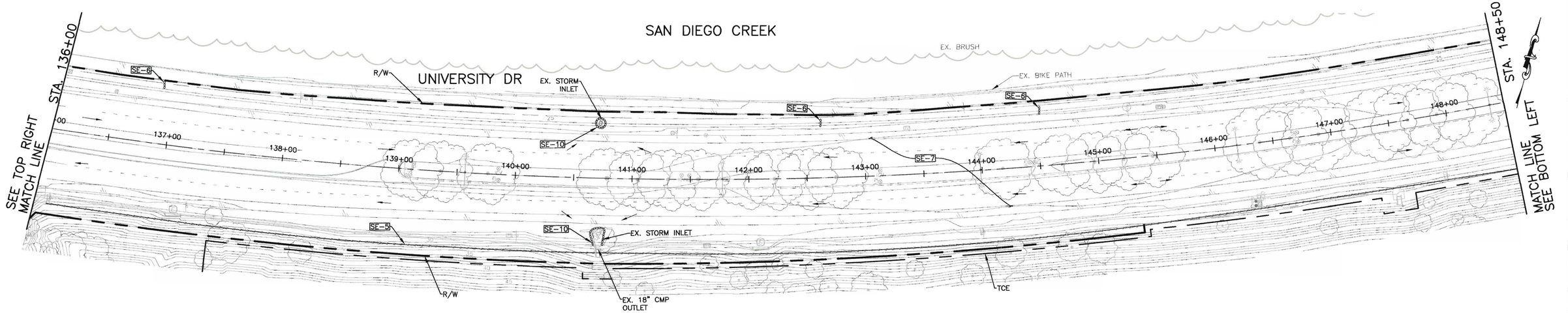
EROSION CONTROL PLAN
UNIVERSITY DRIVE WIDENING
UNIVERSITY DRIVE
STA 113+05 (MACARTHUR BLVD) TO 123+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

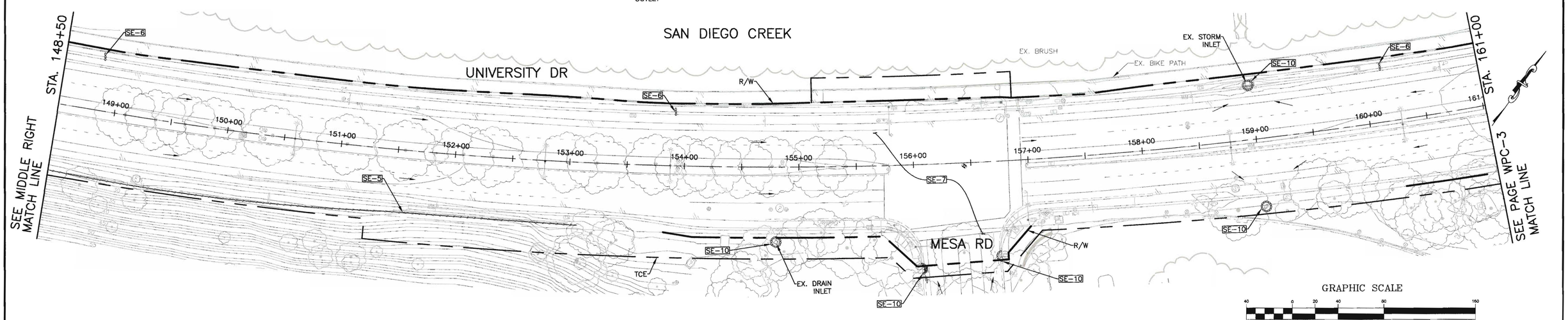
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WPC-1

SHT 15 OF 87







GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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REGISTERED PROFESSIONAL ENGINEER
VIKRAM BAPNA
No. C 52060
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
CWE
1561 E. ORANGETHORPE AVE., SUITE 240
FULLERTON, CA 92831
TEL (714) 526-7500
www.cwecorp.com
VB apna 7/7/2017
VIKRAM BAPNA RCE #52060 DATE

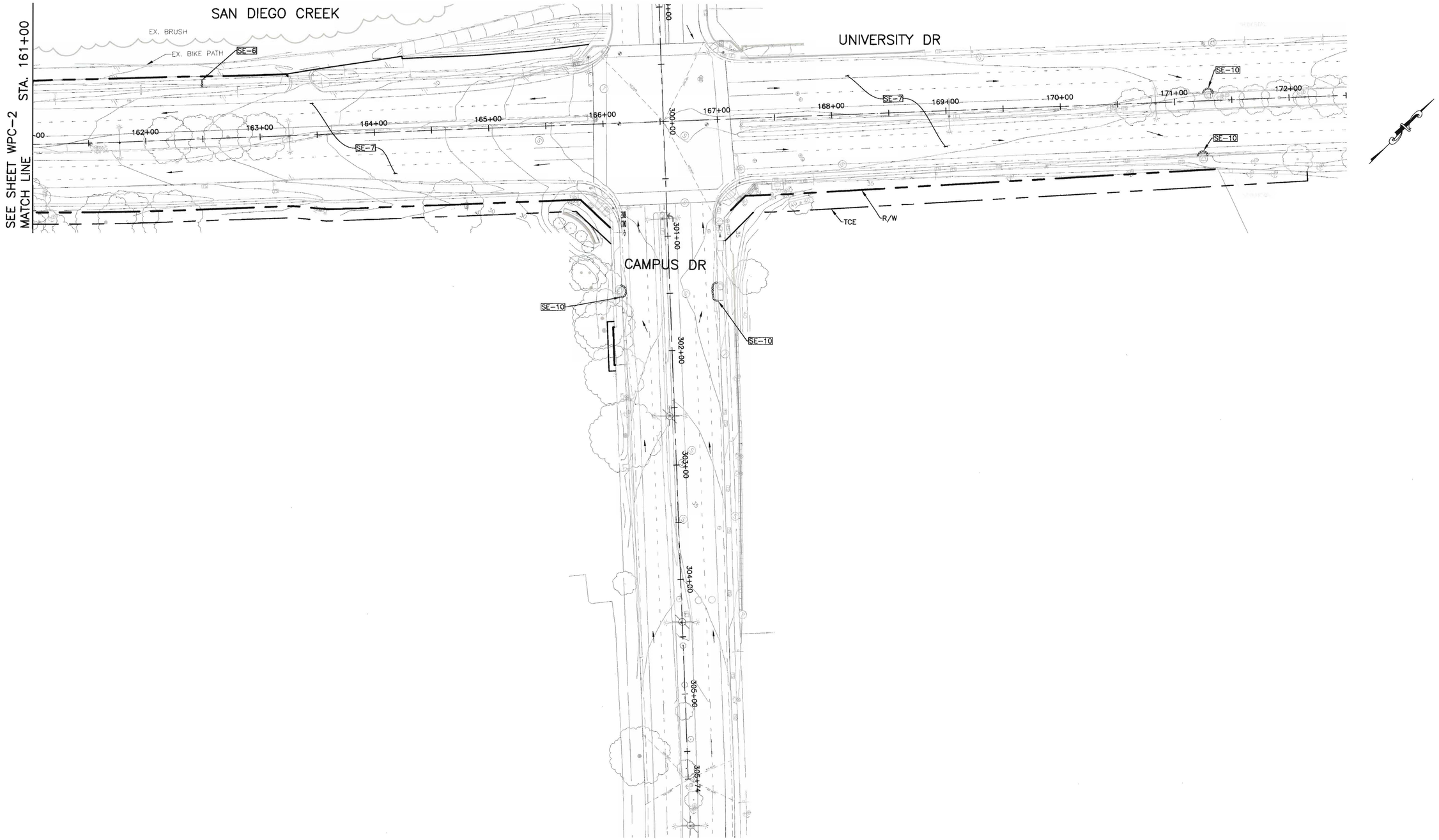
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CHECKED BY:	VB	DATE AUG 2016
RECOMMENDED BY:		DATE

EROSION CONTROL PLAN
UNIVERSITY DRIVE WIDENING
UNIVERSITY DRIVE
STA 123+00 TO 161+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

WPC-2

SHT 16 OF 87



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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5					
4					
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2					
1					

REGISTERED PROFESSIONAL ENGINEER
VIKRAM BAPNA
No. C 52060
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
CWE
1561 E. ORANGETHORPE AVE., SUITE 240
FULLERTON, CA 92831
TEL (714) 526-7500
www.cwecorp.com
VB bapna 7/7/2017
VIKRAM BAPNA RCE #52060 DATE

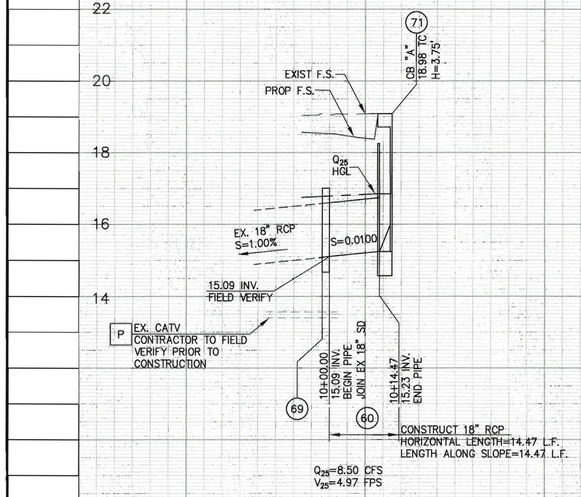
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DESIGNED BY:	TT	AUG 2016
CHECKED BY:	VB	AUG 2016
RECOMMENDED BY:		DATE

EROSION CONTROL PLAN
UNIVERSITY DRIVE WIDENING
UNIVERSITY DRIVE
STA 161+00 TO 172+50 AND CAMPUS DRIVE

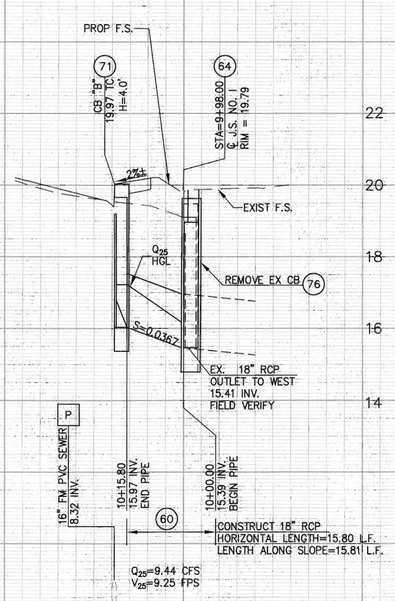
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

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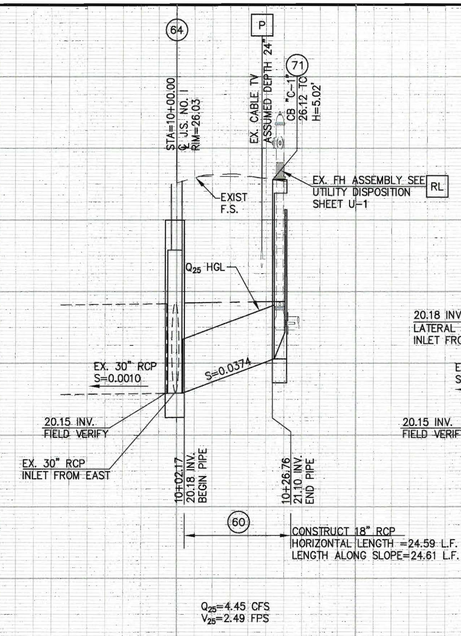
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SHT 17 OF 87



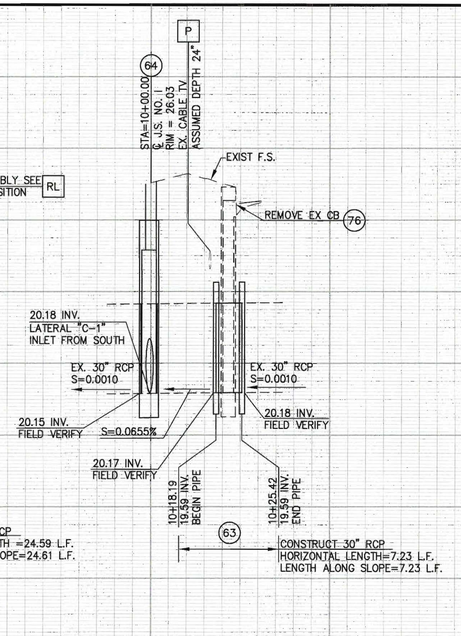
LATERAL "A"



LATERAL "B"

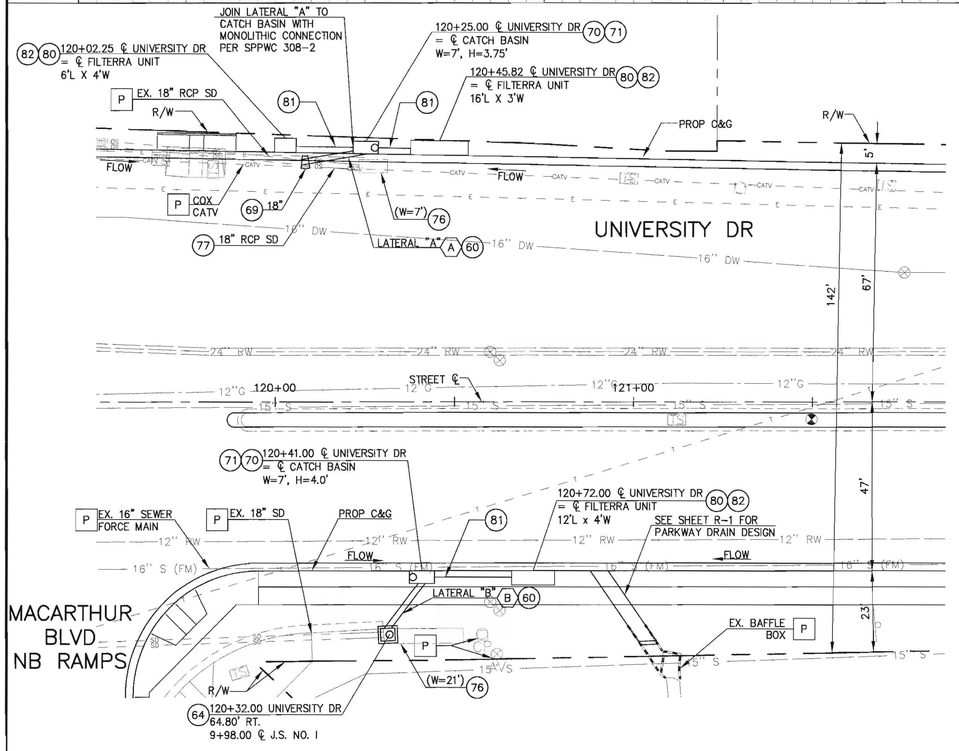


LATERAL "C-1"
ADDITIONAL CB LATERAL



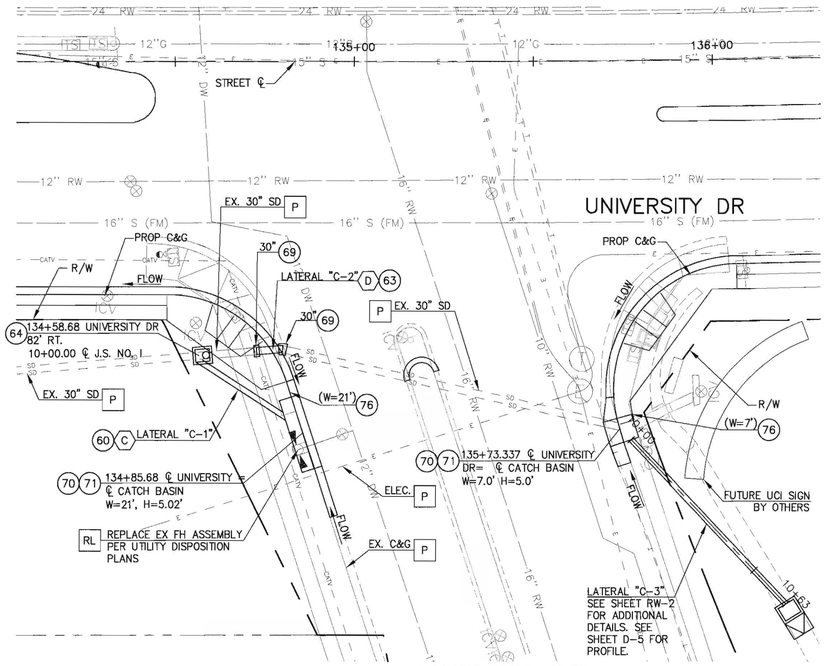
LATERAL "C-2"
EX. 30" STORM DRAIN EXTENSION

SCALE
HORIZ: 1"=20'
VERT: 1"=2'



LATERAL "A" & LATERAL "B"

LINE DATA TABLE		
NO.	BEARING	LENGTH
A	S75°24'11"W	14.47'
B	S32°11'00"W	15.80'
C	S62°10'42"E	26.79'
D	S80°20'09"W	7.23'



CALIFORNIA AVE

LATERAL "C-1", LATERAL "C-2" & LATERAL "C-3"

CONSTRUCTION NOTES

- P PROTECT EXISTING IMPROVEMENT IN PLACE.
- 60 CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 63 CONSTRUCT 30"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 64 CONSTRUCT JUNCTION STRUCTURE NO. 1 PER CITY OF IRVINE STANDARD PLAN 306.
- 69 CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- 70 CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2').
- 71 CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).
- 76 REMOVE EXISTING CATCH BASIN (W PER PLAN).
- 77 REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN (SIZE PER PLAN).
- 80 INSTALL FILTERRA UNIT PER MANUFACTURER RECOMMENDATIONS AND DETAIL 80 ON SHEET DD-1 (DIMENSIONS PER PLAN).
- 81 INSTALL 4"SCH-40 PVC PIPE FROM FILTERRA UNIT TO PROPOSED CATCH BASIN PER CITY OF IRVINE STANDARD PLAN 223 AND 318 AND DETAIL 81 ON SHEET DD-1.
- 82 CONSTRUCT MODIFIED LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2'). MODIFIED WITH 3' WARPED GUTTER SURFACE.

Know what's below
Call before you dig

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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3					
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1					

REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

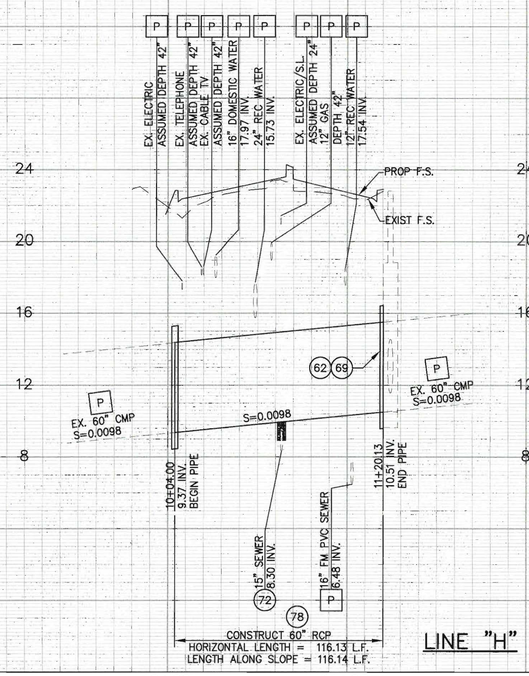
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

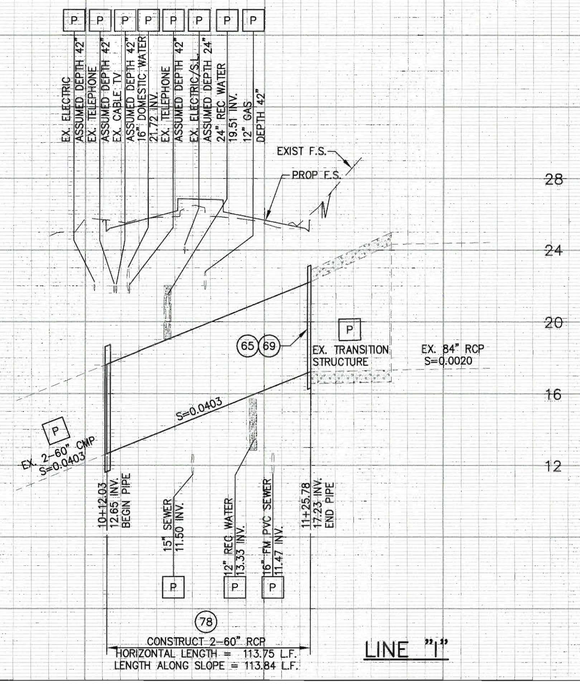
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DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

DRAINAGE PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
LATERAL "A", LATERAL "B", LATERAL "C-1", LATERAL "C-2" & LATERAL "C-3"
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

D-1
SHT 18 OF 87



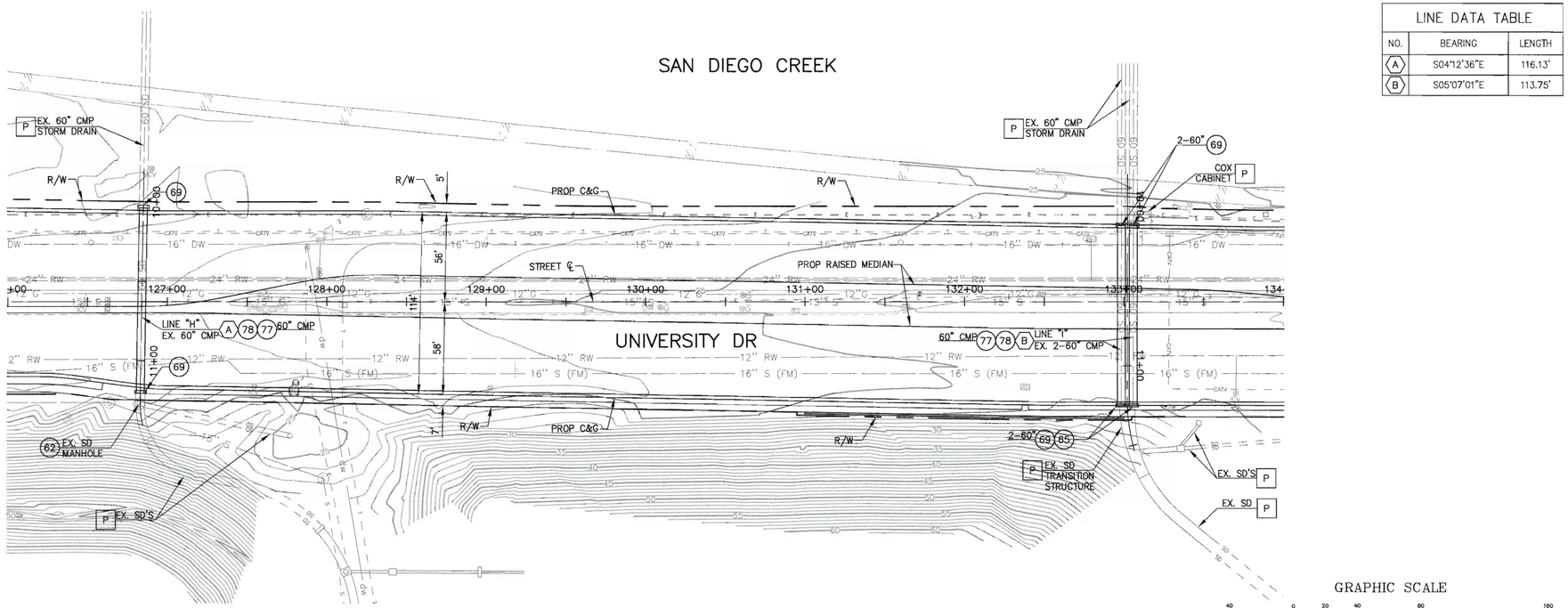


SCALE
HORIZ: 1"=40'
VERT: 1"=4'

LINE DATA TABLE		
NO.	BEARING	LENGTH
A	S04°12'36"E	116.13'
B	S05°07'01"E	113.75'

CONSTRUCTION NOTES

- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- 62 — MODIFY EXISTING STORM DRAIN JUNCTION STRUCTURE TO ENLARGE OPENING WITH HANDHELD TOOLS TO ACCOMODATE PROPOSED RCP OUTSIDE DIAMETER. PLACE HIGH STRENGTH NON SHRINK GROUT ALL AROUND PIPE/JUNCTION STRUCTURE CONNECTION. JOIN CONRETE COLLAR TO EXISTING JUNCTION STRUCTURE WITH #4 BARS EMBEDDED 6" EACH SIDE @ 12" O.C.
- 65 — MODIFY EXISTING STORM DRAIN RCB TRANSITION STRUCTURE TO ENLARGE OPENING WITH HANDHELD TOOLS TO ACCOMODATE PROPOSED RCP OUTSIDE DIAMETER. PLACE HIGH STRENGTH NON SHRINK GROUT ALL AROUND PIPE/TRANSITION STRUCTURE CONNECTION. JOIN CONRETE COLLAR TO EXISTING TRANSITION STRUCTURE WITH #4 BARS EMBEDDED 6" EACH SIDE @ 12" O.C.
- 69 — CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- 72 — CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225-2.
- 77 — REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN (SIZE PER PLAN).
- 78 — CONSTRUCT 60"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

Know what's below
Call before you dig

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

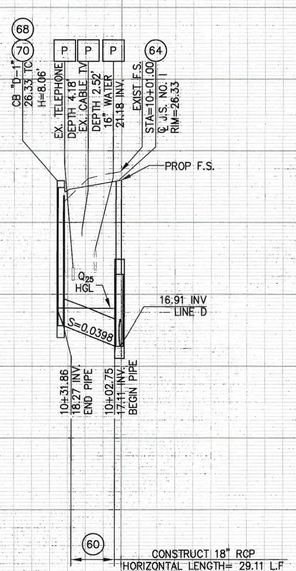
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

DRAINAGE PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
LINE "H" & LINE "I"

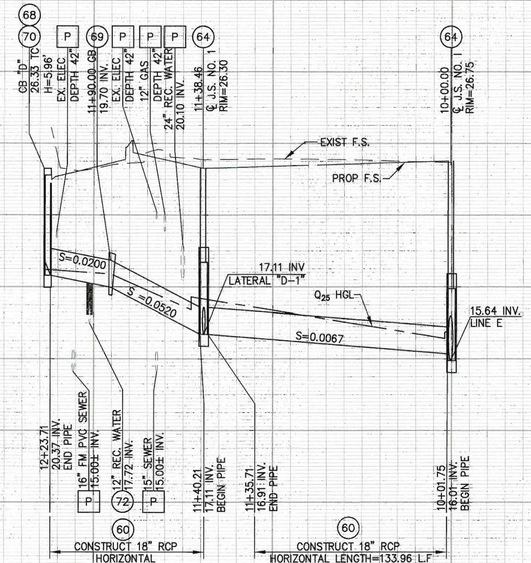
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

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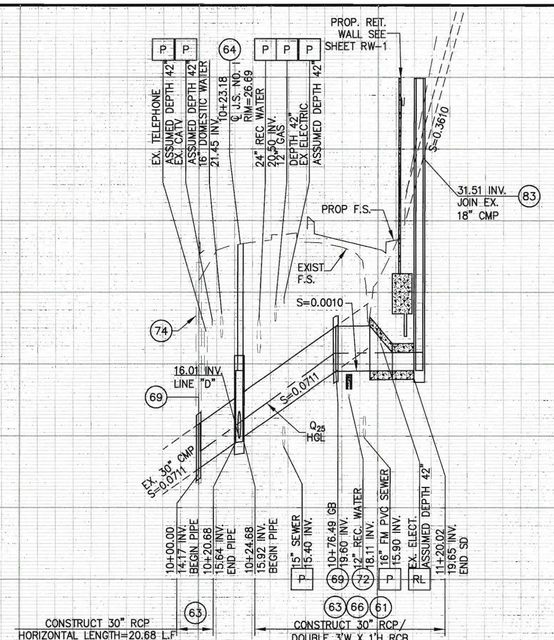
D-2
SHT 19 OF 87



LATERAL "D-1"



LINE "D"



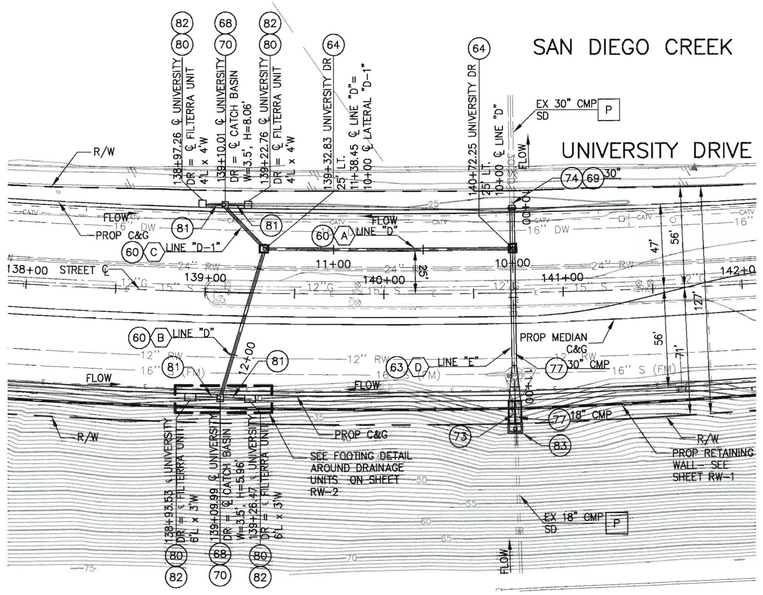
LINE "E"

12+00 11+00 10+00 10+00 11+00 12+00

SCALE
HORIZ: 1"=40'
VERT: 1"=4'

CONSTRUCTION NOTES

- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- RL — RELOCATE EXISTING IMPROVEMENT (TYPE PER PLAN) BY CONTRACTOR UNLESS NOTED OTHERWIE TO BE PERFORMED BY THE UTILITY OWNER.
- (60) CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- (61) CONSTRUCT DOUBLE 3'W X 1'H REINFORCED CONCRETE BOX (RCB) PER CALTRANS STANDARD PLAN D81 AND DETAIL 83 ON SHEET DD-1.
- (63) CONSTRUCT 30"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- (64) CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306.
- (66) CONSTRUCT RCB TO PIPE TRANSITION STRUCTURE PER SPPWC STANDARD PLAN 342-2.
- (68) CONSTRUCT CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300.
- (69) CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- (70) CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2').
- (72) CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225-2.
- (73) REMOVE EXISTING IMPACT BASIN WITH VERTICAL BAFFLE WALL.
- (74) REMOVE EXISTING CSP DROP INLET.
- (77) REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN (SIZE PER PLAN).
- (80) INSTALL FILTERRA UNIT PER MANUFACTURER RECOMMENDATIONS AND DETAIL 80 ON SHEET DD-1 (DIMENSIONS PER PLAN).
- (81) INSTALL 4"SCH-40 PVC PIPE FROM FILTERRA UNIT TO PROPOSED CATCH BASIN PER CITY OF IRVINE STANDARD PLAN 223 AND 318 AND DETAIL 81 ON SHEET DD-1.
- (82) CONSTRUCT MODIFIED LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2'). MODIFIED WITH 3' WARPED GUTTER SURFACE.
- (83) CONSTRUCT MODIFIED JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306 AND DETAIL 83 ON SHEET DD-1.



LINE "D"

CURVE DATA TABLE				
NO.	RADIUS	DELTA	LENGTH	TANGENT
A	3575.45'	02°13'07"	138.46'	69.24'

LINE DATA TABLE		
NO.	BEARING	LENGTH
B	S04°08'26"W	84.77'
C	S56°01'29"E	31.36'
D	S13°23'38"E	120.02'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

811 Know what's below Call before you dig

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NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall G. Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

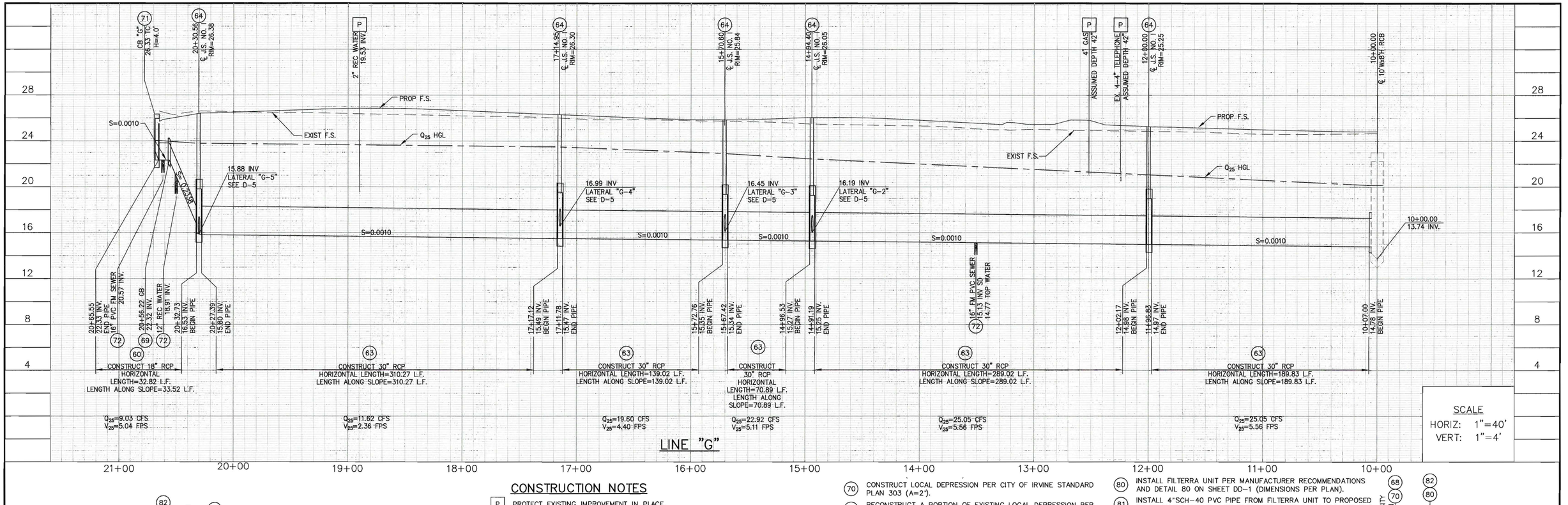
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DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

DRAINAGE PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
LINE "D", LATERAL "D-1" & LINE "E"

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

D-3
SHT 20 OF 87

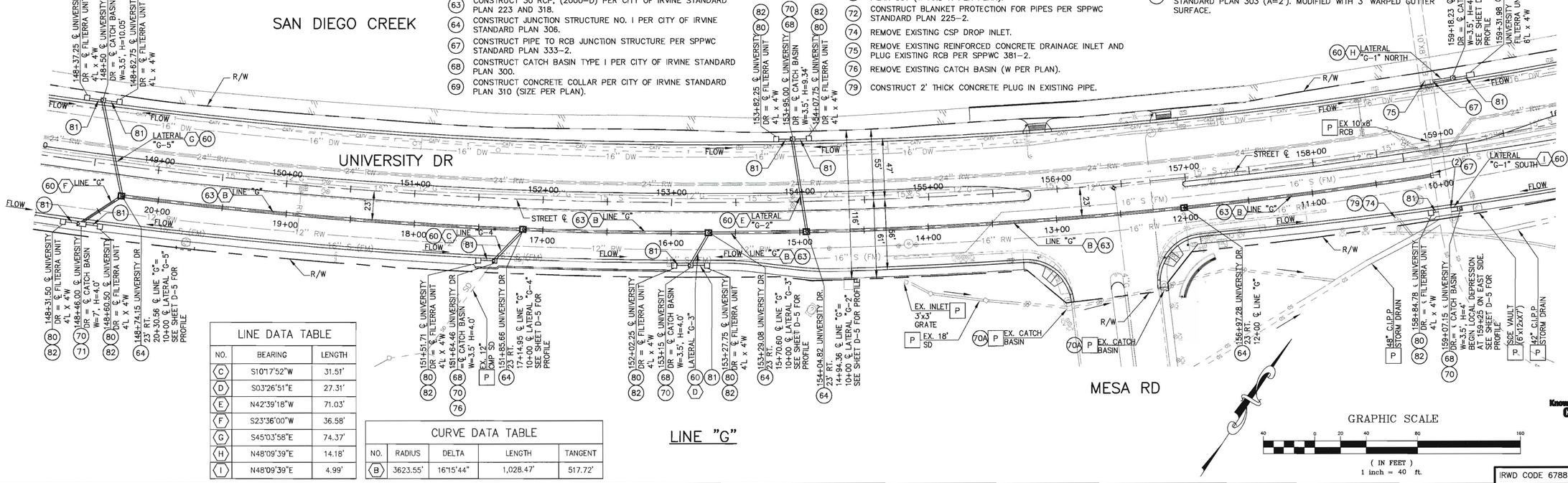


LINE "G"

SCALE
HORIZ: 1"=40'
VERT: 1"=4'

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (60) CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- (63) CONSTRUCT 30"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- (64) CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306.
- (67) CONSTRUCT PIPE TO RCB JUNCTION STRUCTURE PER SPPWC STANDARD PLAN 333-2.
- (68) CONSTRUCT CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300.
- (69) CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- (70) CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2').
- (70A) RECONSTRUCT A PORTION OF EXISTING LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (LENGTH PER PLAN).
- (71) CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).
- (72) CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225-2.
- (74) REMOVE EXISTING CSP DROP INLET.
- (75) REMOVE EXISTING REINFORCED CONCRETE DRAINAGE INLET AND PLUG EXISTING RCB PER SPPWC 381-2.
- (76) REMOVE EXISTING CATCH BASIN (W PER PLAN).
- (79) CONSTRUCT 2' THICK CONCRETE PLUG IN EXISTING PIPE.
- (80) INSTALL FILTERRA UNIT PER MANUFACTURER RECOMMENDATIONS AND DETAIL 80 ON SHEET DD-1 (DIMENSIONS PER PLAN).
- (81) INSTALL 4"SCH-40 PVC PIPE FROM FILTERRA UNIT TO PROPOSED CATCH BASIN PER CITY OF IRVINE STANDARD PLAN 223 AND 318 AND DETAIL 81 ON SHEET DD-1.
- (82) CONSTRUCT MODIFIED LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2'). MODIFIED WITH 3' WARPED GUTTER SURFACE.



LINE "G"

LINE DATA TABLE		
NO.	BEARING	LENGTH
(C)	S10°17'52"W	31.51'
(D)	S03°26'51"E	27.31'
(E)	N42°39'18"W	71.03'
(F)	S23°36'00"W	36.58'
(G)	S45°03'58"E	74.37'
(H)	N48°09'39"E	14.18'
(I)	N48°09'39"E	4.99'

CURVE DATA TABLE				
NO.	RADIUS	DELTA	LENGTH	TANGENT
(B)	3623.55'	16°15'44"	1,028.47'	517.72'

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NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

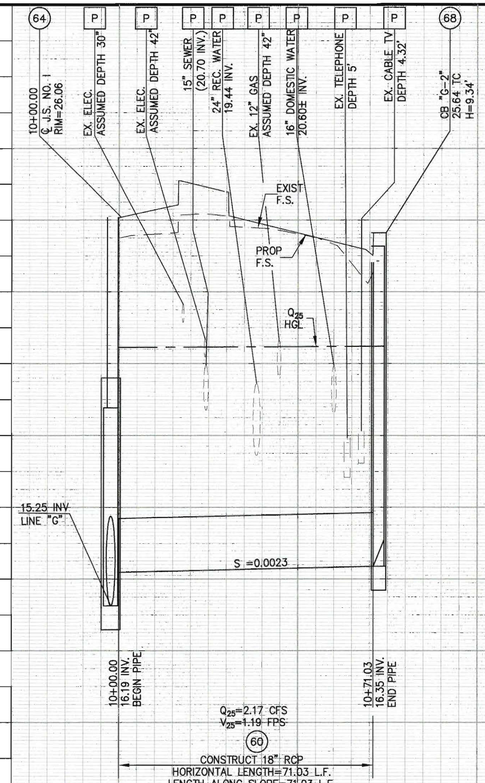
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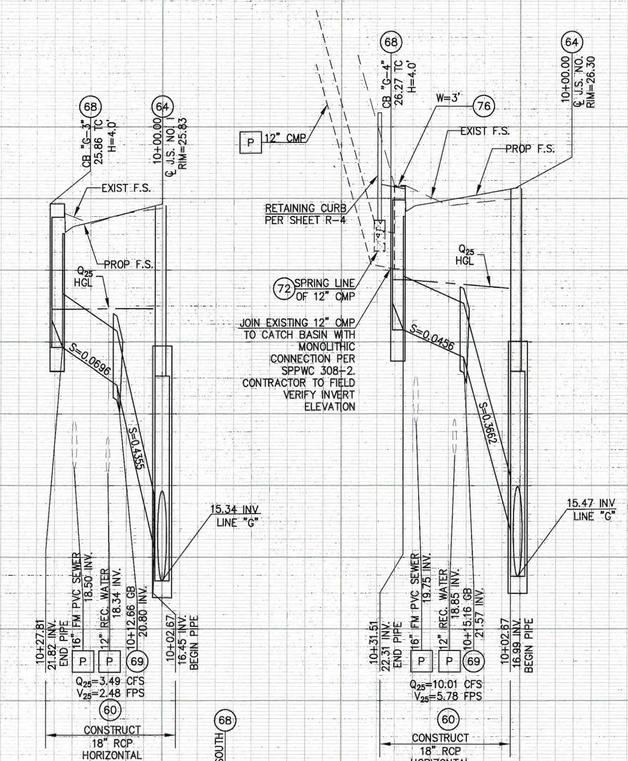
DRAINAGE PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
LINE "G"

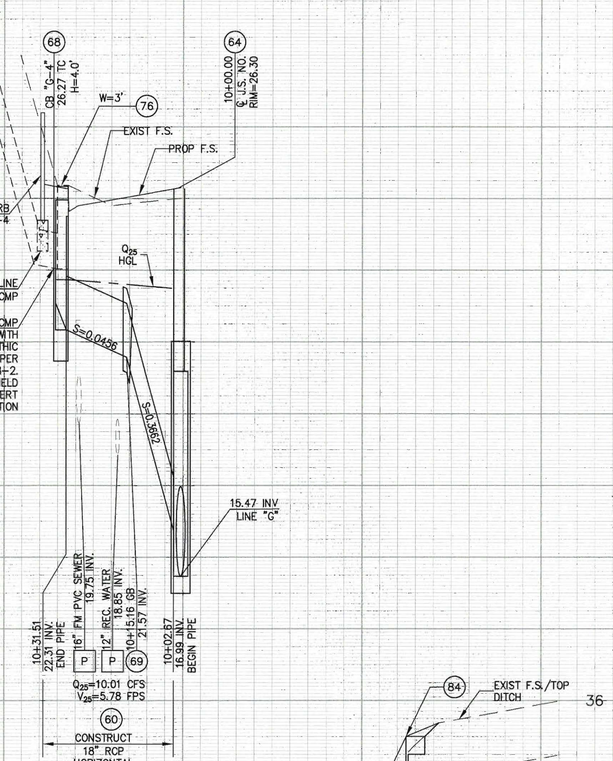
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

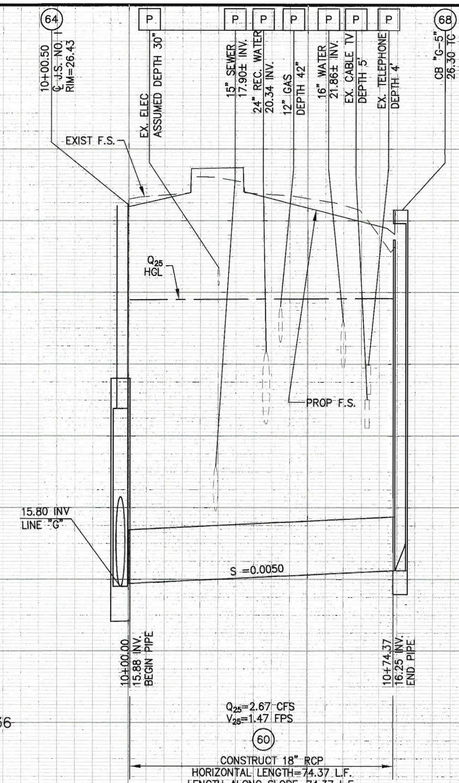
PLAN CHECK NO. 00663284-EMC

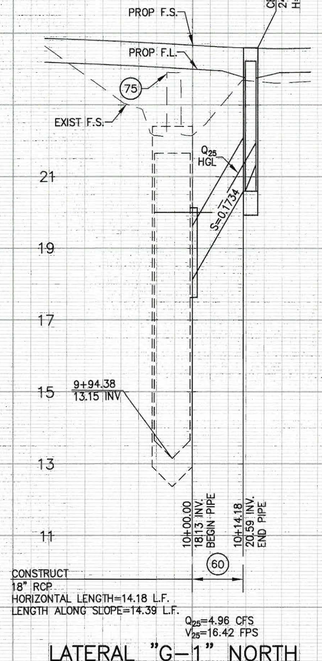
D-4
SHT 21 OF 87

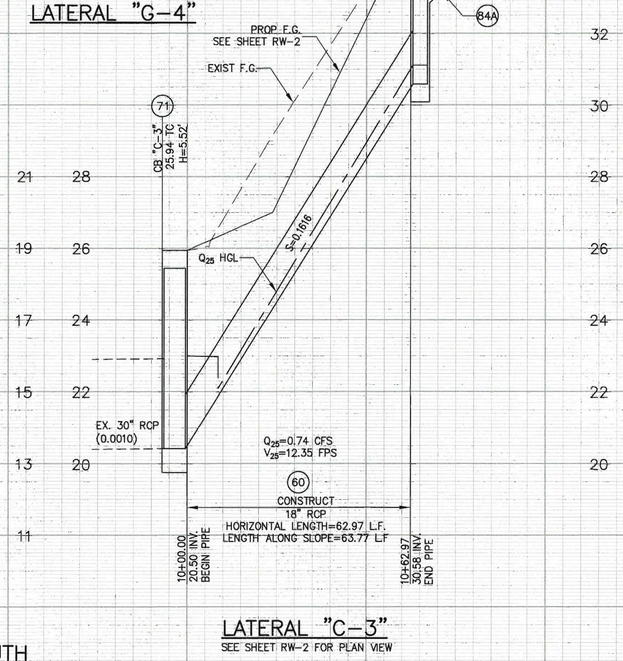












SCALE
HORIZ: 1"=20'
VERT: 1"=2'

CONSTRUCTION NOTES

- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- (60) CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- (64) CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STANDARD PLAN 306.
- (68) CONSTRUCT CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300.
- (69) CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STANDARD PLAN 310 (SIZE PER PLAN).
- (71) CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).
- (72) CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225-2.
- (75) REMOVE EXISTING REINFORCED CONCRETE DRAINAGE INLET AND PLUG EXISTING RCB PER SPPWC 381-2.
- (76) REMOVE EXISTING CATCH BASIN (W PER PLAN).
- (84) CONSTRUCT MODIFIED CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300 AND DETAIL 84 ON SHEET RW-2.
- (84A) CONSTRUCT V DITCH TO "U" GUTTER TRANSITION. MATCH EXISTING V DITCH UPSTREAM AND MATCH 5' X 1.5' INLET OPENING DOWNSTREAM. PLACE 12" LONG #4 "L" DOWELS AT 12" O.C. TO JOIN "U" GUTTER WITH INLET BOX.

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6					
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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ◆ FAX: (949) 655-3995
Randall G. Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

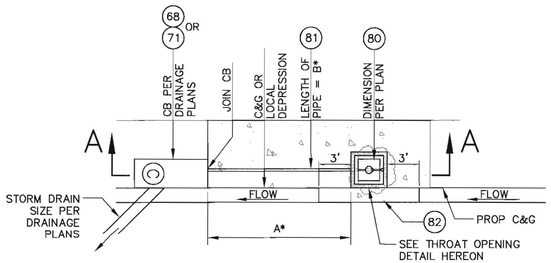
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DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

DRAINAGE PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
LATERAL PROFILES

PLAN CHECK NO. 00663284-EMC

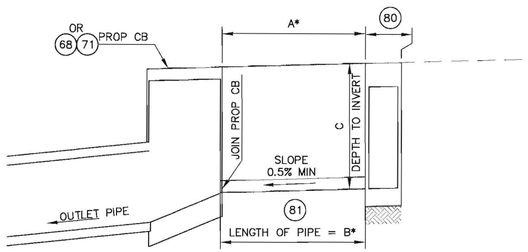
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

D-5
SHT 22 OF 87



PLAN VIEW
NOT TO SCALE

* SEE PLAN VIEW FOR LOCATIONS WHERE B>A TO AVOID OBSTRUCTIONS.



SECTION A–A
NOT TO SCALE

FILTERRA LOCATION PROPERTIES						
CB LAT.	SIZE	SHEET	A	B	C	INSTALL SIDEWALK WIDENING
A (RIGHT)	16'L X 3'W	D–1	9.00'	9.00'	3.50'	N
A (LEFT)	6'L X 4'W	D–1	16.00'	16.00'	3.50'	N
B	12'L X 4'W	D–1	21.50'	21.50'	3.50'	N
D (RIGHT)	6'L X 3'W	D–3	9.00'	9.00'	3.50'	N
D (LEFT)	6'L X 3'W	D–3	9.00'	9.00'	3.50'	N
D–1 (RIGHT)	4'L X 4'W	D–3	9.00'	9.00'	3.50'	N
D–1 (LEFT)	4'L X 4'W	D–3	9.00'	9.00'	3.00'	N
G (RIGHT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	Y
G (LEFT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	Y
G–5 (RIGHT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	N
G–5 (LEFT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	N
G–4	4'L X 4'W	D–4	9.00'	9.00'	3.50'	Y
G–3 (RIGHT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	Y
G–3 (LEFT)	4'L X 4'W	D–4	9.00'	9.00'	3.00'	Y
G–2 (RIGHT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	N
G–2 (LEFT)	4'L X 4'W	D–4	9.00'	9.00'	3.50'	N
G–1–N	6'L X 4'W	D–4	9.00'	9.00'	3.50'	N
G–1–S	4'L X 4'W	D–4	4.00'	4.00'	3.00'	Y

80 FILTERRA TYPICAL DETAIL
NOT TO SCALE

CONSTRUCTION NOTES

(61) CONSTRUCT DOUBLE 3'W X 1'H REINFORCED CONCRETE BOX (RCB) PER CALTRANS STANDARD PLAN D81 AND DETAIL 83 ON SHEET DD–1.

(63) CONSTRUCT 30"RCP, (2000–D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.

(66) CONSTRUCT RCB TO PIPE TRANSITION STRUCTURE PER SPPWC STANDARD PLAN 342–2.

(68) CONSTRUCT CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300.

(71) CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).

(72) CONSTRUCT BLANKET PROTECTION FOR PIPES PER SPPWC STANDARD PLAN 225–2.

(73) REMOVE EXISTING IMPACT BASIN WITH VERTICAL BAFFLE WALL.

(77) REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN (SIZE PER PLAN).

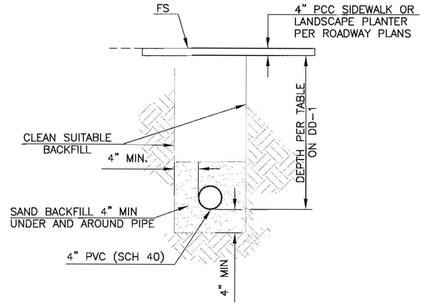
(80) INSTALL FILTERRA UNIT PER MANUFACTURER RECOMMENDATIONS AND DETAIL 80 ON SHEET DD–1 (DIMENSIONS PER PLAN).

(81) INSTALL 4"SCH–40 PVC PIPE FROM FILTERRA UNIT TO PROPOSED CATCH BASIN PER CITY OF IRVINE STANDARD PLAN 223 AND 318 AND DETAIL 81 ON SHEET DD–1.

(82) CONSTRUCT MODIFIED LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2'). MODIFIED WITH 3' WARPED GUTTER SURFACE.

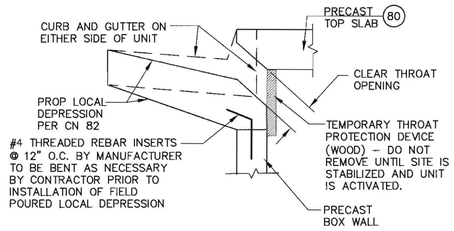
(83) CONSTRUCT MODIFIED JUNCTION STRUCTURE NO. 1 PER CITY OF IRVINE STANDARD PLAN 306 AND DETAIL 83 ON SHEET DD–1.

(90) CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL PER CALTRANS STANDARD PLAN B3–1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X–1.



IN PARKWAY

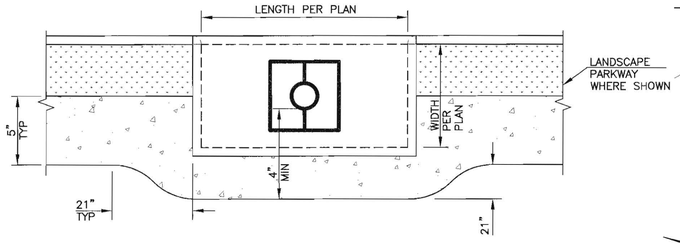
81 4" PVC SCH 40 INSTALLATION DETAILS
NOT TO SCALE



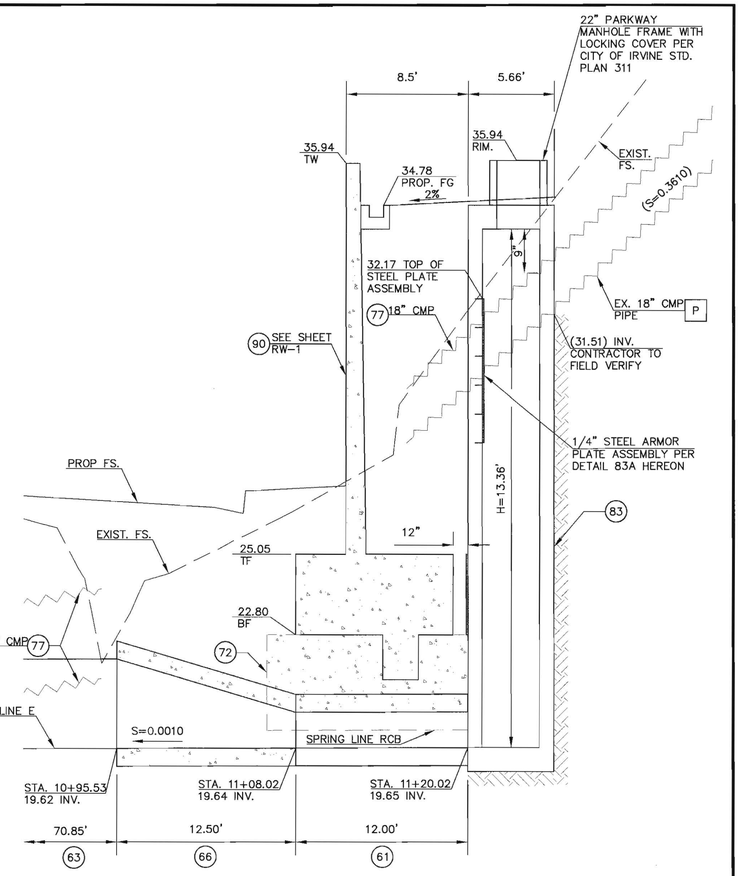
THROAT OPENING DETAIL
NOT TO SCALE

83A ARMOR PLATE DETAIL
NOT TO SCALE

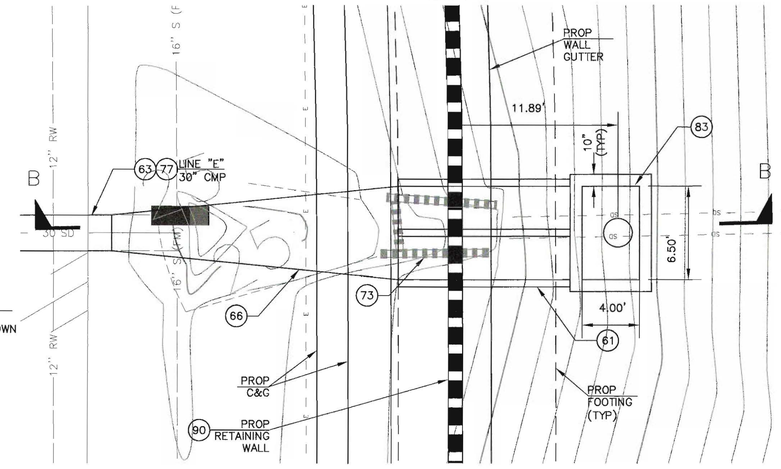
UNIVERSITY DRIVE



80 SIDEWALK WIDENING DETAIL
NOT TO SCALE



SECTION B–B
HORIZ: 1"=5'
VERT: 1"=2'



83 MODIFIED JUNCTION STRUCTURE NO. 1
HORIZ: 1"=5'

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

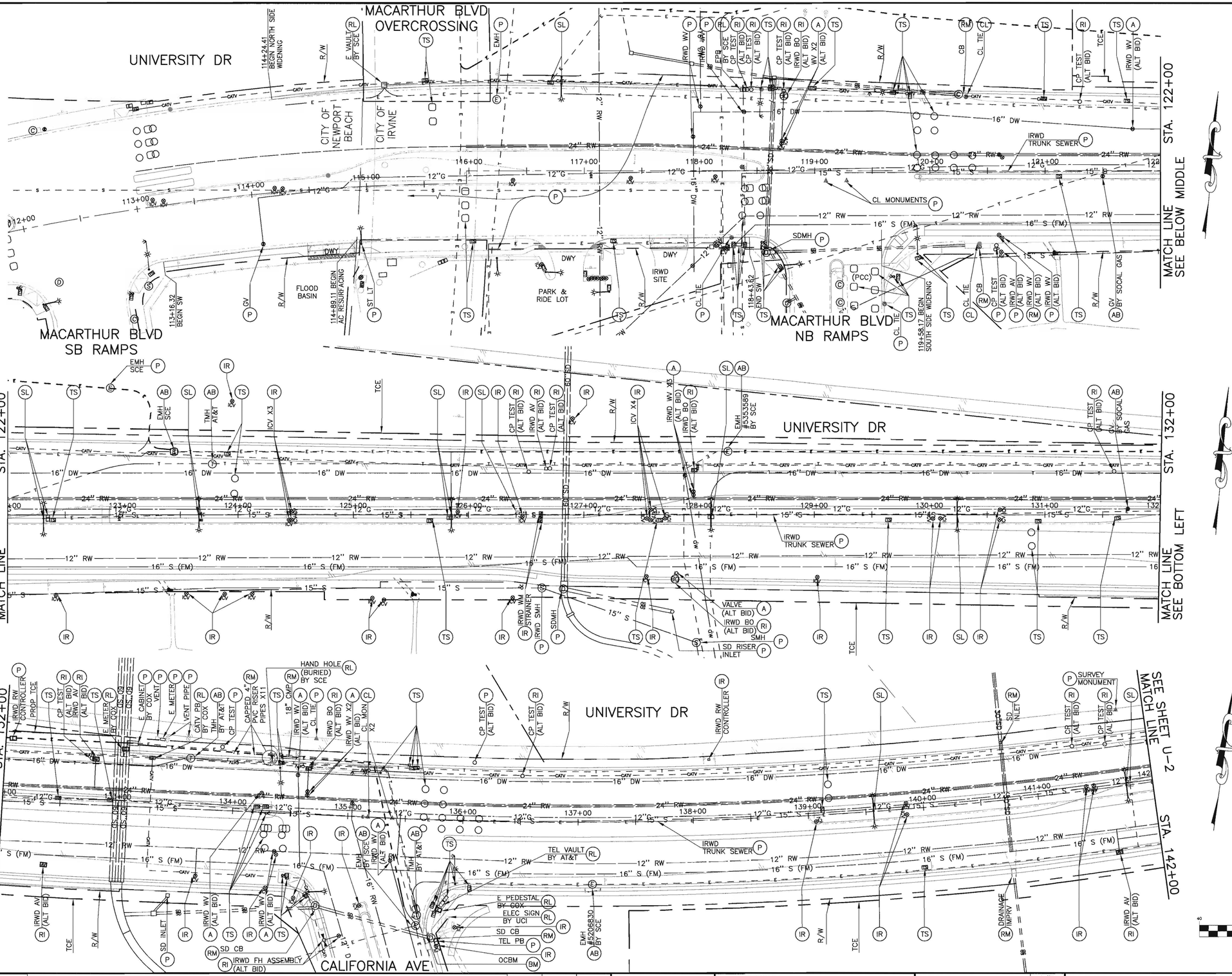
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655–3900 • FAX: (949) 655–3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	CG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

DRAINAGE DETAILS
UNIVERSITY DRIVE WIDENING
DRAINAGE DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

DD–1
SHT 23 OF 87



UTILITY DISPOSITION NOTES:

- (A) ADJUST TO GRADE (IMPROVEMENT TYPE SHOWN ON PLAN).
- (AB) ADJUST TO GRADE BY OTHERS (IMPROVEMENT TYPE AND OWNER SHOWN ON PLAN).
- (BM) RESET OC SURVEY BENCH MARK PER ROADWAY PLANS.
- (CL) RESET CENTER LINE MONUMENT AND/OR CENTER LINE TIE PER ROADWAY PLANS.
- (IR) PROTECT/MODIFY/RELOCATE EXISTING IRRIGATION IMPROVEMENT AS REQUIRED PER NEW GRADES AND PER IRRIGATION PLANS.
- (P) PROTECT IN PLACE (IMPROVEMENT TYPE PER PLAN).
- (RL) RELOCATE EXISTING IMPROVEMENT (TYPE PER PLAN) BY CONTRACTOR UNLESS NOTED OTHERWISE TO BE PERFORMED BY UTILITY OWNER.
- (RM) REMOVE EXISTING IMPROVEMENT (TYPE PER PLAN). PLACE COMPACTED BACKFILL AS NEEDED TO FILL REMAINING VOIDS.
- (SL) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING STREET LIGHT IMPROVEMENT PER STREET LIGHT IMPROVEMENT PLANS.
- (TS) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLANS.
- (RI) REMOVE EXISTING IMPROVEMENT AND FURNISH & INSTALL NEW IMPROVEMENT PER IRWD FACILITY RELOCATION PLAN SHEETS.

NOTE: PROTECT ALL EXISTING UTILITIES UNLESS SHOWN OTHERWISE ON PLAN.

GENERAL NOTES

1. THIS PLAN IS ACCURATE FOR UTILITY DISPOSITION ONLY. ALL OTHER ITEMS ARE COVERED UNDER SEPARATE PLANS.
2. FOR ROADWAY IMPROVEMENTS, SEE ROADWAY PLANS R-1 TO R-6.
3. FOR STORM DRAIN IMPROVEMENTS, SEE DRAINAGE PLANS D-1 TO D-5.
4. FOR LANDSCAPING AND IRRIGATION, SEE LANDSCAPING & IRRIGATION PLANS LI-1 TO LI-22.
5. FOR TRAFFIC SIGNAL AND SIGNAL INTERCONNECT, SEE TRAFFIC SIGNAL MODIFICATION PLANS, AND TRAFFIC SIGNAL INTERCONNECT PLANS E-1 TO E-7.
6. FOR ALTERNATE (ALT) BID ITEM IMPROVEMENTS, SEE IRWD FACILITY RELOCATION PLANS IRWD-1 TO IRWD-8

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

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REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

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Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

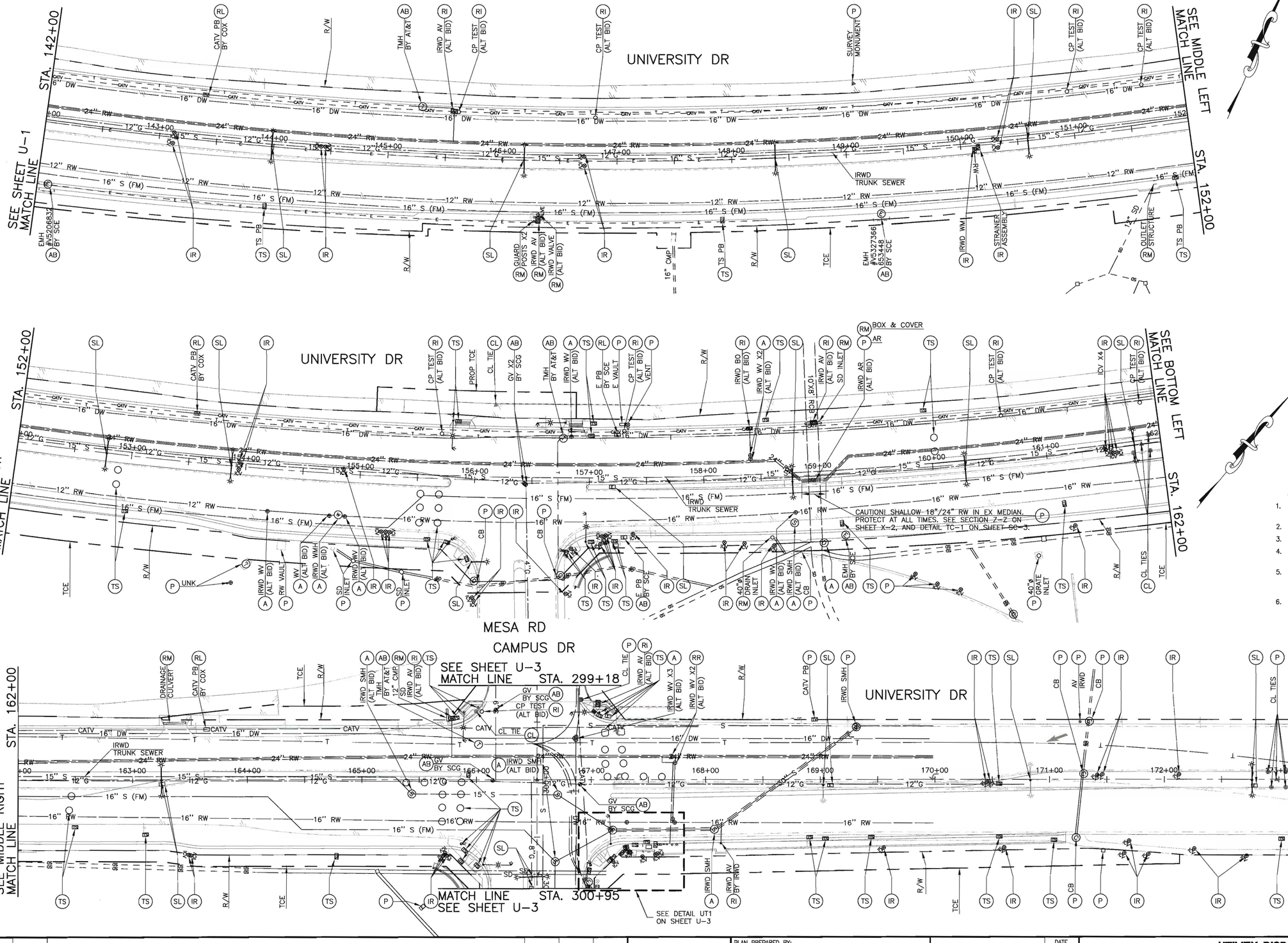
DRAWN BY: GG/MG/CM	DATE	JUL 2016
DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

UTILITY DISPOSITION
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
CITY BOUNDARY TO STA 142+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

U-1

SHT 24 OF 87



UTILITY DISPOSITION NOTES:

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- (RL) RELOCATE EXISTING IMPROVEMENT (TYPE PER PLAN) BY CONTRACTOR UNLESS NOTED OTHERWISE TO BE PERFORMED BY UTILITY OWNER.
- (RM) REMOVE EXISTING IMPROVEMENT (TYPE PER PLAN). PLACE COMPACTED BACKFILL AS NEEDED TO FILL REMAINING VOIDS.
- (SL) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING STREET LIGHT IMPROVEMENT PER STREET LIGHT IMPROVEMENT PLANS.
- (TS) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLANS.
- (RI) REMOVE EXISTING IMPROVEMENT AND FURNISH & INSTALL NEW IMPROVEMENT PER IRWD FACILITY RELOCATION PLAN SHEETS
- (RR) REMOVE & REPLACE EXISTING VALVE WITH NEW VALVE IN KIND.

NOTE: PROTECT ALL EXISTING UTILITIES UNLESS SHOWN OTHERWISE ON PLAN.

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GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

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REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

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Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

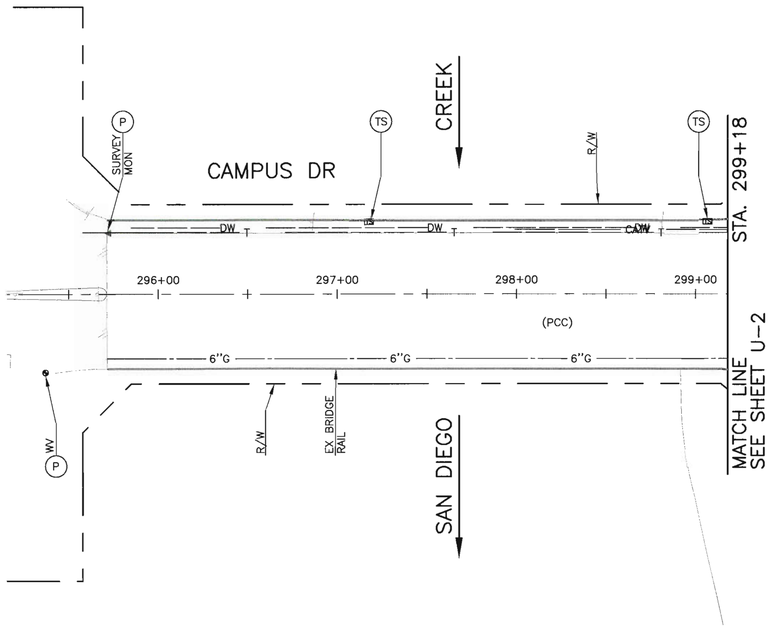
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DESIGNED BY:	MG/CM	DATE JUL 2016
CHECKED BY:	RGB	DATE JUL 2016
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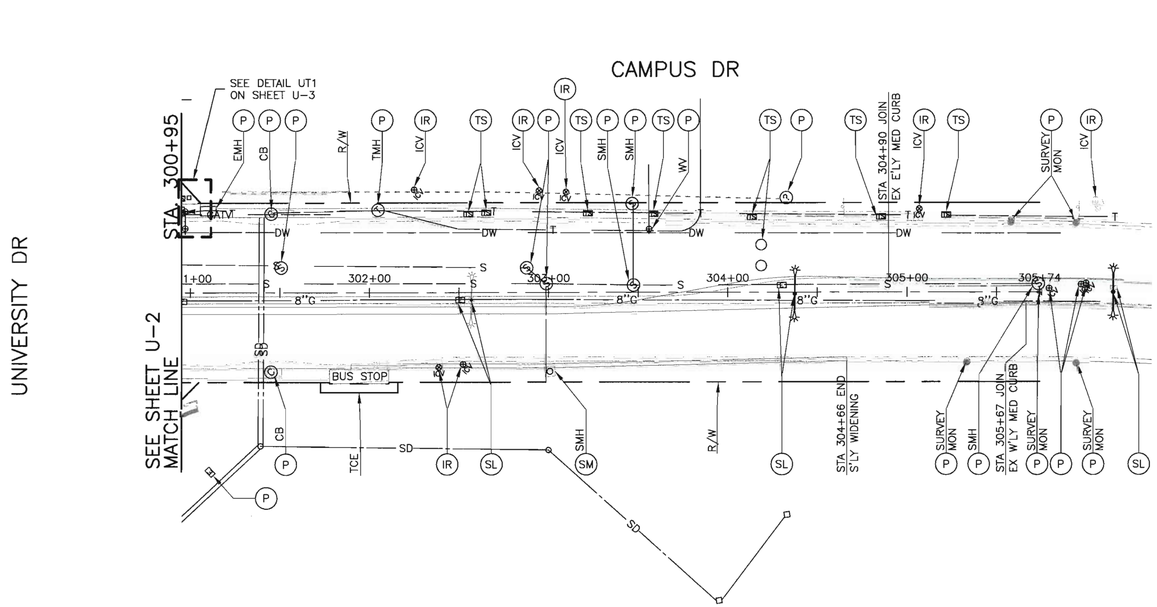
UTILITY DISPOSITION
UNIVERSITY DRIVE WIDENING
UNIVERSITY DR
STA 142+00 TO 172+08
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

U-2

SHT 25 OF 87





UNIVERSITY DR

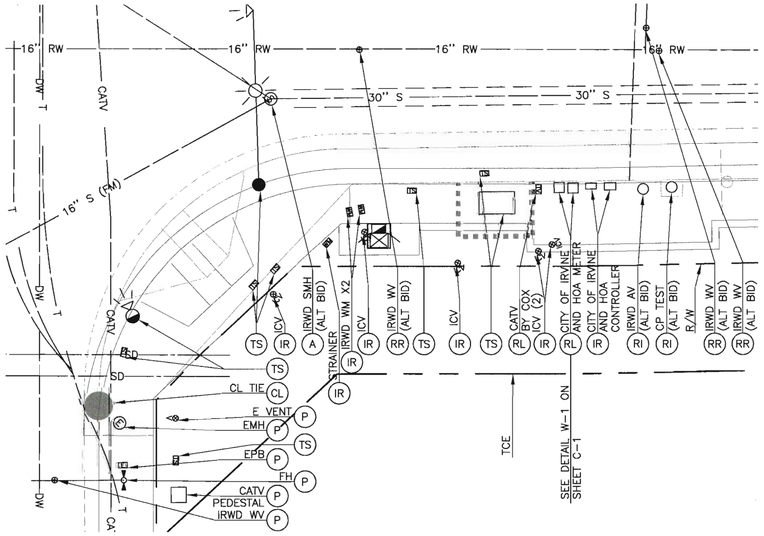
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- (SL) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING STREET LIGHT IMPROVEMENT PER STREET LIGHT IMPROVEMENT PLANS.
- (SM) CUT AND REMOVE INTERFERING SECTION OF CONCRETE SLAB AND PROTECT SEWER MANHOLE IN PLACE.
- (TS) PROTECT/MODIFY/RELOCATE/RECONSTRUCT EXISTING TRAFFIC SIGNAL IMPROVEMENT PER TRAFFIC SIGNAL MODIFICATION PLANS AND/OR TRAFFIC SIGNAL INTERCONNECT PLANS.
- (RI) REMOVE EXISTING IMPROVEMENT AND FURNISH & INSTALL NEW IMPROVEMENT PER IRWD FACILITY RELOCATION PLAN SHEETS
- (RR) REMOVE & REPLACE EXISTING VALVE WITH NEW VALVE IN KIND.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.



GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

DETAIL UT1

NOTE: PROTECT ALL EXISTING UTILITIES UNLESS SHOWN OTHERWISE ON PLAN.

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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY: GG/MG/CM	DATE	JUL 2016
DESIGNED BY: MG/CM	DATE	JUL 2016
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IRWD CODE 6788 | C.I.P. NO. 311306

UTILITY DISPOSITION
UNIVERSITY DRIVE WIDENING
CAMPUS DR
STA 296+17 TO 305+67
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

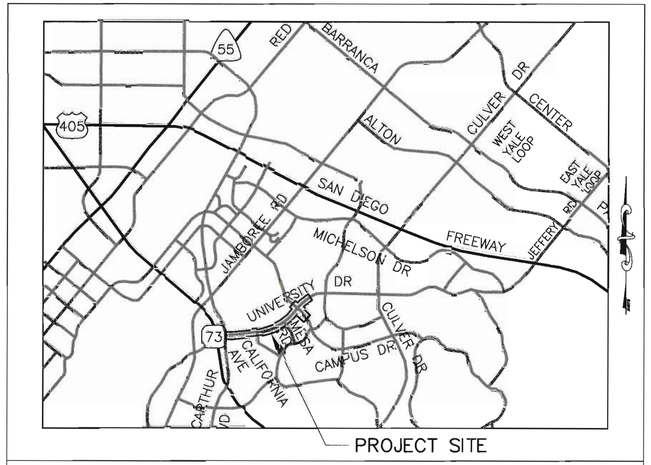
PLAN CHECK NO. 00663284-EMC

U-3

SHT 26 OF 87

WORKSITE STAGE CONSTRUCTION PLAN

STREET IMPROVEMENTS ON UNIVERSITY DRIVE FROM MACARTHUR BLVD TO CAMPUS DRIVE



LOCATION MAP
NO SCALE

STAGE CONSTRUCTION GENERAL NOTES:

1. ALL TRAFFIC CONTROL WORK AND TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF:
   - THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (CA MUTCD)
   - WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH MANUAL)
   - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK"
   - ALL O.S.H.A. REQUIREMENTS
   - CALIFORNIA VEHICLE CODE
2. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL CONSTRUCTION SIGNS, DELINEATORS, K-RAIL, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
3. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL SIGNS, DELINEATORS, K-RAIL, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC WHILE WORKING IN THE STREET.
4. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE CITY INSPECTOR / REPRESENTATIVE TO ASSURE PUBLIC SAFETY AT ALL TIMES.
5. THE CONTRACTOR SHALL UTILIZE A FLAGMAN DURING CONSTRUCTION WORK AS DEEMED NECESSARY BY THE CITY INSPECTOR.
6. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURE ON ARTERIAL STREETS.
7. CONTRACTOR SHALL SAND BLAST ALL CONFLICTING EXISTING STRIPING, REMOVE CONFLICTING RPMS AND COVER/REMOVE CONFLICTING EXISTING SIGNAGE.
8. TEMPORARY STREET LIGHTING (LOCATION SHOWN IS APPROXIMATE) SHALL BE PLACED BEHIND THE INSTALLED K-RAILS AT 250' INTERVALS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING POWER AND PROVIDING SHOP DRAWINGS SHOWING CONDUIT, CONDUCTORS, ETC.
9. ALL K-RAIL SHALL BE FRESHLY PAINTED WHITE AND TOPPED WITH REFLECTOR TABS (YELLOW ON CENTER DIVIDERS AND WHITE ON EDGE K-RAILS) AT 25' SPACING.
10. CONTRACTOR SHALL COVER ALL EXISTING SIGNS THAT CONFLICT WITH THE CONSTRUCTION SIGNS. CONTRACTOR SHALL UNCOVER EXISTING SIGNS AS SOON AS THE CONSTRUCTION SIGNS ARE REMOVED.
11. ALL STRIPING, LEGENDS, MARKINGS, AND RAISED PAVEMENT MARKERS SHALL CONFORM TO CALTRANS STANDARD PLANS AND STANDARD SPECIFICATIONS, LATEST EDITION, INCLUDING CALTRANS STANDARD PLANS A20 DETAILS.
12. THE CONTRACTOR SHALL PROVIDE FOR ACCESS TO ALL ADJACENT PROPERTIES DURING WORK HOURS. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING PROPERTY OWNERS/OPERATORS.
13. FLASHING YELLOW BEACONS TYPE "B" SHALL BE USED ON ALL W20-1 SIGNS AND ALL TYPE III BARRICADES GUARDING THE WORK AREA OVERNIGHT.
14. WHERE WORK ZONE AND SPEED LIMIT SIGNS G20-5aP AND R2-1 ARE USED, THE CONTRACTOR SHALL COVER ALL CONFLICTING REGULATORY SPEED LIMIT SIGNS.
15. ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE. WORK AREA WARNING SIGNS SHALL BE ORANGE SIGN FACE.
16. ALL DELINEATORS SHALL BE 36" MINIMUM PORTABLE DRUM DELINEATORS, REFLECTORIZED, AND MAINTAINED ERECT IN INDICATED POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
17. EXACT LOCATION AND TYPE OF CONSTRUCTION SIGN(S) (C27, C30) SHALL BE AS DIRECTED BY THE ENGINEER BASED UPON CONSTRUCTION CONDITIONS.
18. ALL TEMPORARY TRAFFIC CONTROL DEVICES NOT NEEDED FOR PERMANENT CLOSURE SHALL BE REMOVED FROM TRAVEL LANES BY THE CLOSE OF WORKING HOURS EACH DAY. TRENCHES SHALL BE BACKFILLED OR STEEL-PLATED DURING NON-WORK HOURS. STEEL PLATES SHALL HAVE A NON-SKID SURFACE AND BE RECESSED AND SECURELY SUPPORTED SO THEY WON'T ROCK AND A SIGN POSTED NEAR THE PLATES IDENTIFYING THE CONTRACTORS NAME AND 24 HOUR EMERGENCY TELEPHONE NUMBER.
19. THE CONTRACTOR SHALL PROVIDE A SAFE BICYCLE DETOUR AND SAFE PEDESTRIAN ACCESS AT ALL TIMES.
20. ALL PROPERTIES THAT HAVE ACCESS ADJACENT TO THE WORK AREA SHALL BE NOTIFIED OF ACCESS RESTRICTIONS (IN WRITING 5 WORKING DAYS BEFORE START OF WORK). THE NOTIFICATION SHALL DESCRIBE THE ACCESS LIMITATIONS, DATE OF LIMITATION AND GIVE THE APPROXIMATE DATE AND TIME OF ACCESS RESTORATION. NO ACCESS SHALL BE LIMITED DURING NON-WORKING HOURS EXCEPT AS APPROVED BY THE CITY. NO WORK IS PERMITTED ON SUNDAYS OR HOLIDAYS UNLESS APPROVED BY THE CITY.
21. THE FOLLOWING AGENCIES SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY DETOUR AND/OR CONSTRUCTION ACTIVITIES.

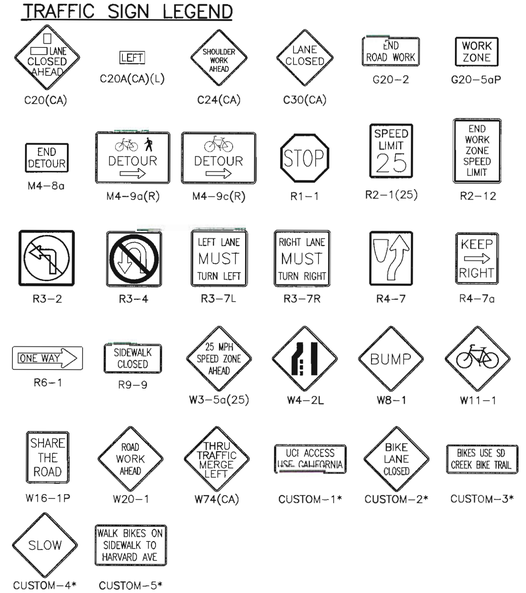
    CITY OF IRVINE:
    PUBLIC WORKS.....(949) 724-7365
    TRAFFIC ENGINEERING.....(949) 724-7324
    POLICE (GIVE LOCATION AND DURATION).....(949) 724-7000

    COUNTY OF ORANGE:
    PUBLIC WORKS/CONSTRUCTION.....(714) 667-8800
    FIRE DEPARTMENT.....(714) 573-6801

    CALTRANS:.....(949) 724-2000

    UC-IRVINE:.....(949) 824-5011
22. ANY DAMAGED PAVEMENT STRIPING, STENCILING OR RAISED PAVEMENT MARKERS (RPM'S) MUST BE REPLACED PER CALTRANS STANDARDS, LATEST EDITION. PLACE TEMPORARY PLASTIC STRIPING TABS DURING INTERIM PERIOD BEFORE PERMANENT STRIPING IS PLACED.
23. TRAFFIC SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES. CONFLICTING TRAFFIC SIGNAL INDICATIONS SHALL BE COVERED, AND SIGNAL OPERATION DURING EACH CONSTRUCTION PHASE SHALL BE COORDINATED WITH AND APPROVED BY THE CITY ENGINEER. FOR SIGNALIZED INTERSECTIONS, IF PERMANENT VIDEO DETECTION IS NOT YET OPERATIONAL, THE CONTRACTOR HAS FOUR (4) HOURS UPON CUTTING THE EXISTING LOOPS TO INSTALL A TEMPORARY VIDEO DETECTION SYSTEM. CONTRACTOR SHALL COORDINATE WITH CITY AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY WORK THAT WILL AFFECT THE OPERATION OF A TRAFFIC SIGNAL.
24. SENSITIVE HABITAT AREAS TO BE AVOIDED INCLUDE ALL AREAS NORTH OF UNIVERSITY DRIVE. NO CONSTRUCTION STAGING AREAS SHALL BE LOCATED IN THESE AREAS.
25. STAGING AREAS SHALL BE SELECTED WITH THE FOLLOWING CONDITIONS:
    - CONSTRUCTION EQUIPMENT OR ACTIVITY SHALL NOT OCCUR OUTSIDE THE STAGING AREA
    - NO UPLAND AREAS VEGETATED WITH NATIVE PLANTS SHALL BE USED FOR STAGING OR STORAGE AREAS.
    - CONSTRUCTION ACCESS SHALL NOT RESULT IN IMPACTS TO RIPARIAN OR WETLAND HABITAT

TRAFFIC SIGN LEGEND



* 6" MIN HEIGHT LETTERING, BLACK LETTERS ON ORANGE BACKGROUND

NOTES TO CONTRACTOR:

A. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK ON A PUBLIC STREET TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN HEREIN, AS WELL AS ANY SUCH ADDITIONAL TRAFFIC CONTROL DEVICE AS MAY BE REQUIRED TO INSURE THE SAFE MOVEMENT OF TRAFFIC, BICYCLES, AND PEDESTRIANS THROUGH OR AROUND THE WORK AREA AND PROVIDE MAXIMUM PROTECTION AND SAFETY TO CONSTRUCTION WORKERS.

B. THE CITY RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND TO MAKE ANY NECESSARY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL SUPERSEDE THESE PLANS AND BE DONE PER CALIFORNIA MUTCD WITH THE APPROVAL OF THE CITY ENGINEER, SOLELY AT THE CONTRACTOR'S EXPENSE. REVISED TRAFFIC CONTROL PLANS MAY BE REQUIRED BY THE CITY. EXACT LOCATION OF ALL EQUIPMENT AND TRAFFIC CONTROL DEVICES SHALL BE DETERMINED BY THE ENGINEER.

C. ALL DELINEATORS SHALL BE EQUIPPED WITH REFLECTIVE BAND AT NIGHT TIME.

D. ALL TRAFFIC LANES SHALL HAVE A MINIMUM OF 5 FEET CLEARANCE FROM OPEN EXCAVATIONS AND A MINIMUM OF 2 FEET FROM VERTICAL OBSTRUCTIONS.

E. OPEN TRENCH WITH LESS THAN FIVE FEET OF CLEARANCE SHALL BE PROTECTED BY K-RAIL BARRIERS AND TEMPORARY CRASH CUSHIONS INSTALLED PER CALTRANS STANDARDS.

F. CONTRACTOR SHALL PROVIDE FLAGGERS AS DEEMED NECESSARY BY THE CITY ENGINEER.

G. ALL ADVANCED WARNING SIGNS SHALL BE EQUIPPED WITH FLAGS DURING DAYTIME WORKING HOURS AND WITH WARNING LIGHTS AT NIGHT.

H. TRAFFIC SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES. CONFLICTING TRAFFIC SIGNAL INDICATIONS SHALL BE COVERED AND SIGNAL OPERATION DURING EACH CONSTRUCTION PHASE SHALL BE COORDINATED WITH AND APPROVED BY THE CITY ENGINEER.

I. PLACE ADDITIONAL "LANE CLOSED" (C30) SIGNS ON TYPE II BARRICADES AT 150 FOOT INTERVALS THROUGHOUT EXTENDED WORK AREAS IN EACH LANE THAT IS CLOSED. INSTALL "OPEN TRENCH" (C27) SIGNS WHENEVER AN OPEN EXCAVATION AREA EXISTS ADJACENT TO THE TRAVELED WAY.

J. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION STAGE AND THE PERMANENT TRAFFIC CONTROL DEVICES SHALL BE RESTORED BY THE CONTRACTOR UPON COMPLETION OF PROJECT.

K. CONTRACTOR SHALL REPLACE/REPAIR ALL DAMAGED STRIPING WITH TEMPORARY STRIPING OR RAISED PAVEMENT MARKERS AT END OF EACH WORKING DAY.

L. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT ACCESSIBILITY GUIDELINES AND WITH THE CALIFORNIA ACCESSIBILITY GUIDELINES AS RELATED TO PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK AND BIKE LANE CLOSURE/DETOUR SHALL COMPLY WITH THE CALIFORNIA MUTCD STANDARDS.

M. CONTRACTOR SHALL POST "SYMBOL" UNEVEN LANES, "STEEL PLATES AHEAD" OR "BUMP" SIGNS, FOR PAVEMENT SURFACE DISRUPTIONS OF ½ IN. OR GREATER. PAVEMENT DISRUPTIONS OF 1 IN. OR GREATER SHALL HAVE BEVELED EDGE OF FOUR (4) HORIZONTAL TO ONE (1) VERTICAL.

N. CONTRACTOR SHALL INSTALL "CAUTION STEEL PLATES AHEAD" AND/OR "ROUGH ROAD" SIGNS IN ADVANCE OF STEEL PLATE BRIDGING.

O. CONTRACTOR SHALL NOTIFY OCTA AT (714) 636-7433 EXT. 2 OR ANY OTHER AFFECTED TRANSIT SERVICES AT LEAST FIVE WORKING DAYS PRIOR TO CONSTRUCTION.

P. CONTRACTOR SHALL NOTIFY ALL AFFECTED RESIDENTS, BUSINESSES, AND UC-IRVINE FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION.

Q. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.

R. ALL NIGHT WORK REQUIRES PROPER LIGHTING OF WORK AREAS PER CAL/OSHA REQUIREMENTS. AVOID DIRECTING LIGHTING TOWARD APPROACHING TRAFFIC AND TOWARD FRONTING PROPERTIES.

TRAFFIC ACCESS REQUIREMENTS:

1. THE CONTRACTOR SHALL MAINTAIN THE FOLLOWING TRAFFIC LANE REQUIREMENTS.

   UNIVERSITY DRIVE:

   A. THE CONTRACTOR SHALL MAINTAIN AND PROTECT MINIMUM TWO LANES OF THROUGH TRAFFIC IN EACH DIRECTION, UNLESS OTHERWISE NOTED HEREON THESE TRAFFIC CONTROL PLANS. LANE WIDTH ON A PAVED TRAVEL PATH SHALL BE 11 FEET MINIMUM.

   B. PROHIBIT LEFT TURNS WHEN IN CONFLICT WITH CONSTRUCTION AND WHEN LEFT TURN VISIBILITY IS RESTRICTED BY CONSTRUCTION ACTIVITIES.

2. ALL PRIVATE DRIVEWAYS AND SIDE STREETS SHALL BE KEPT OPEN AT ALL TIMES. DRIVEWAY REPLACEMENTS SHALL BE CONSTRUCTED IN STAGES TO MAINTAIN ACCESS. ALL OPEN EXCAVATIONS ON PUBLIC STREETS SHALL BE BACK-FILLED OR STEEL-PLATED (ANTI-SKID PLATES) FOR TRAFFIC TO THE SATISFACTION OF CITY ENGINEER OUTSIDE THE WORKING HOURS. TRAFFIC SHALL BE RESTORED TO NORMAL CONDITIONS DURING NON-WORKING HOURS, EXCEPT WHERE LONG-TERM TRAFFIC CONTROL INSTALLATIONS WITH K-RAIL APPLY.
3. MAINTAIN MIN. 25' TURNING RADIUS AT ALL TIMES.
4. PLACE CHANGEABLE MESSAGE SIGNS AT ALL PROJECT APPROACHES, ALL SIDE STREETS, AND LOCATIONS DESIGNATED BY THE ENGINEER, 14 DAYS PRIOR TO START OF WORK TO WARN MOTORISTS TO USE ALTERNATIVE ROUTES.

STREET	POSTED WORK ZONE SPEED LIMIT	MINIMUM TAPER LENGTH (L) BASED ON 12' LANE	SPACING OF DELINEATORS	SIGN SPACING
UNIVERSITY DR (WORK ZONE)	25 MPH	L = 125' (MERGE) 1/2L = 65' (SHIFT) 1/3L = 45' (SHOULDER)	25' (TAPER) 25' (TANGENT) 12' (CONFLICT)	100'
CALIFORNIA AVE (WORK ZONE)	25 MPH	L = 125' (MERGE) 1/2L = 65' (SHIFT) 1/3L = 45' (SHOULDER)	25' (TAPER) 25' (TANGENT) 12' (CONFLICT)	100'
MESA RD (WORK ZONE)	25 MPH	L = 125' (MERGE) 1/2L = 65' (SHIFT) 1/3L = 45' (SHOULDER)	25' (TAPER) 25' (TANGENT) 12' (CONFLICT)	100'
CAMPUS DR (WORK ZONE)	25 MPH	L = 125' (MERGE) 1/2L = 65' (SHIFT) 1/3L = 45' (SHOULDER)	25' (TAPER) 25' (TANGENT) 12' (CONFLICT)	100'

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

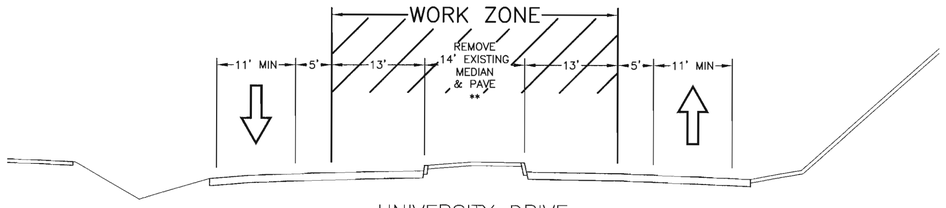
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY: GC/MC/CM	DATE	JUL 2016
DESIGNED BY: MC/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
NOTES
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

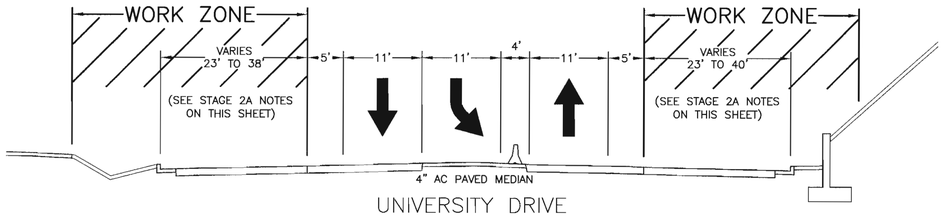
SC-1
SHT 27 OF 87



UNIVERSITY DRIVE
STAGE 1 – NIGHT WORK

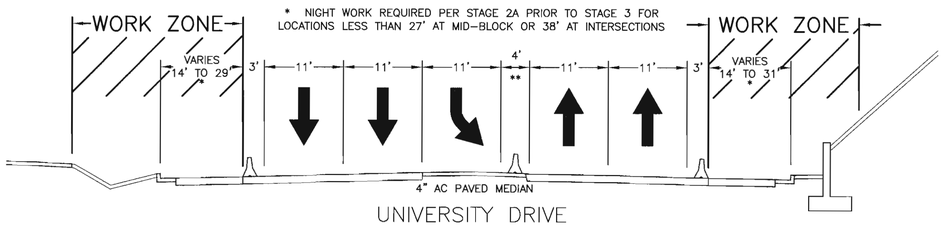
** FROM STA 158+70 TO 159+20, PROTECT EX MEDIAN AND WATER LINE. (SEE DETAIL TC-1 ON SHEET SC-3)

WORKING HOURS: 10 PM TO 5 AM
DURATION: APPROXIMATELY 15 WORKING DAYS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 2A – AT INTERSECTION – NIGHT WORK

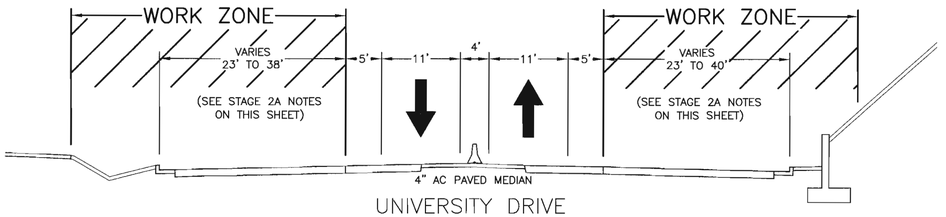
WORKING HOURS: 10 PM TO 5 AM
DURATION: APPROXIMATELY 2 MONTHS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 2 – AT INTERSECTION

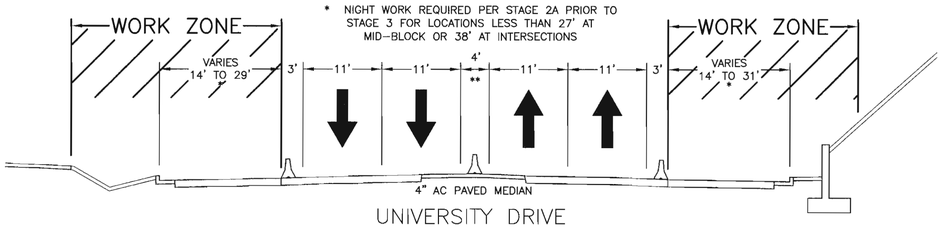
** FROM STA 158+70 TO 159+20, PROTECT EX MEDIAN AND WATER LINE. (SEE DETAIL TC-1 ON SHEET SC-3)

WORKING HOURS: 7 AM TO 7 PM
DURATION: APPROXIMATELY 6 MONTHS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 2A – AT MID BLOCK – NIGHT WORK

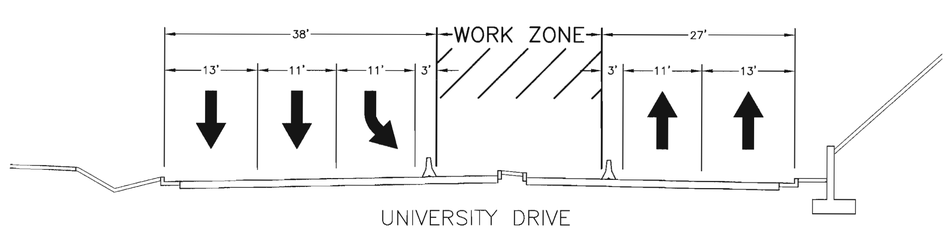
WORKING HOURS: 10 PM TO 5 AM
DURATION: APPROXIMATELY 2 MONTHS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 2 – AT MID BLOCK

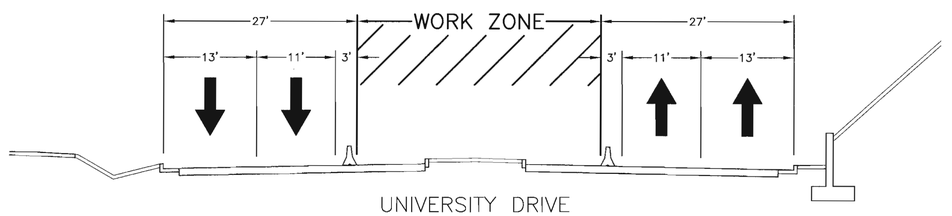
** FROM STA 158+70 TO 159+20, PROTECT EX MEDIAN AND WATER LINE. (SEE DETAIL TC-1 ON SHEET SC-3)

WORKING HOURS: 7 AM TO 7 PM
DURATION: APPROXIMATELY 6 MONTHS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 3 – AT INTERSECTION

WORKING HOURS: 7 AM TO 7 PM
DURATION: APPROXIMATELY 4 MONTHS (UNLESS APPROVED OTHERWISE)



UNIVERSITY DRIVE
STAGE 3 – AT MID BLOCK

WORKING HOURS: 7 AM TO 7 PM
DURATION: APPROXIMATELY 4 MONTHS (UNLESS APPROVED OTHERWISE)

TYPICAL SECTION NOTES:

1. NO PLAN VIEW LAYOUTS HAVE BEEN PREPARED FOR STAGE 1, STAGE 2A, OR STAGE 3A. USE TYPICAL LANE CLOSURE DETAILS PER MUTCD/"WATCH" HANDBOOK TO PROTECT WORK AREA DURING NIGHT WORK OPERATIONS AND OPEN UP ALL LANES TO TRAFFIC DURING NON-WORKING HOURS.
2. NO TYPICAL SECTION IS SHOWN FOR STAGE 2B. SEE SHEET SC-11 FOR STAGE 2B BIKE TRAIL/SERVICE ROAD DETOUR.
3. UNIVERSITY DRIVE STAGE 3A – NIGHT WORK (TYPICAL SECTION NOT SHOWN) APPLIES TO INTERSECTION PAVING OUTSIDE LIMITS NOT COVERED BY OTHER STAGES. COMPLETE CLOSURE OF CALIFORNIA AVE AND MESA RD WITH PROPER DETOUR SIGNAGE IS ALLOWED. WORKING HOURS: 8PM TO 5AM. DURATION: APPROXIMATELY 20 WORKING DAYS (UNLESS APPROVED OTHERWISE).
4. UNLESS SPECIFIED ELSEWHERE IN THE SPECIAL PROVISIONS, INSPECTION OF THE WORK WILL BE PROVIDED BY THE AGENCY BETWEEN THE HOURS OF 7:00 A.M. AND 3:30 P.M., MONDAY THROUGH FRIDAY, EXCLUSIVE OF AGENCY HOLIDAYS. ANY INSPECTIONS REQUESTED BY OR MADE NECESSARY AS A RESULT OF THE ACTIONS OF THE CONTRACTOR BEYOND THE HOURS STATED ABOVE SHALL BE PAID FOR BY THE CONTRACTOR AT THE PREVAILING RATE OF 1-1/2 TIMES THE REGULAR HOURLY WAGE RATE, PLUS 21% FOR OVERHEAD COSTS. SEE SPECIFICATIONS SECTION 2-11.1.

STAGE 2A NOTES:

1. NIGHT WORK FOR STAGE 2A CAN BEGIN IN ANY SPECIFIC AREA AFTER STAGE 2 WORK IS COMPLETED AS LONG AS CRASH CUSHIONS ARE PLACED AT K-RAIL TERMINUS AS APPROVED BY THE ENGINEER.
2. WORK COMPLETED FOR STAGE 2A NIGHT WORK WILL PRIMARILY CONSIST OF EXTENSION OF PERPENDICULAR UTILITY CROSSINGS AND PAVEMENT REHAB/RECONSTRUCTION.
3. FOR STAGE 2A, CONTRACTOR SHALL CONSTRUCT TEMPORARY FINISHED SURFACE (FS) TO TRANSITION FROM EXISTING MEDIAN-SIDE LANE GRADES TO PROPOSED OUTSIDE LANE GRADES AT THE END OF EACH WORKING NIGHT.
4. FINAL WEARING COURSE AC SHALL BE PLACED AT ONE TIME TOWARD THE END OF CONSTRUCTION WITH AC PAVING MACHINE JOINTS OCCURRING ON LANE LINES.
5. PROPOSED FS DESIGN IS A STRAIGHT-GRADE FROM PROPOSED 8" MEDIAN CURB TO PARKWAY GUTTER LIP.
6. HARRIS & ASSOCIATES WILL MAKE THE 3D DIGITAL TERRAIN MODEL (DTM) SURFACE AVAILABLE TO CONTRACTOR'S SURVEYOR TO ALLOW PROFILES TO BE "CUT" ALONG ANY CONTROL LINE PROFILE REQUIRED TO CONTROL ALL INTERIM FS WORK.

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REGISTERED PROFESSIONAL ENGINEER – RANDALL G. BERRY – NO. C44642 – RENEW. 3/31/18 – CIVIL – STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
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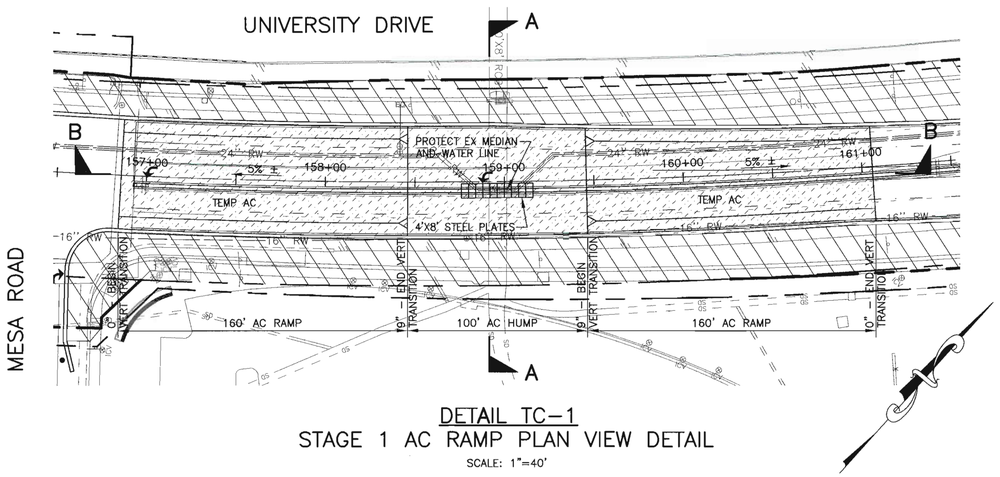
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
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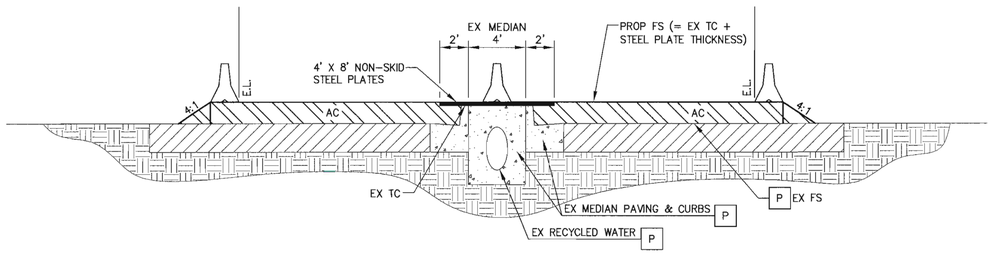
STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
TYPICAL SECTIONS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

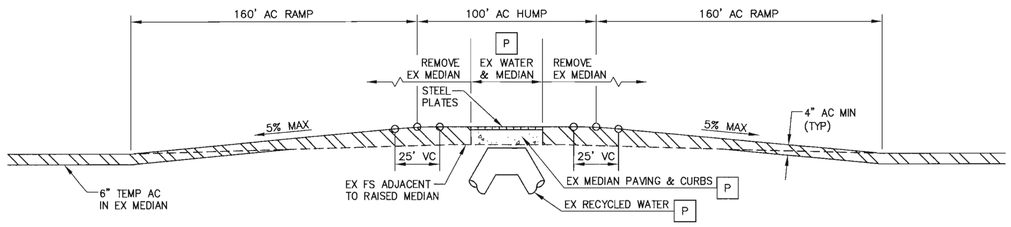
SC-2
SHT 28 OF 87



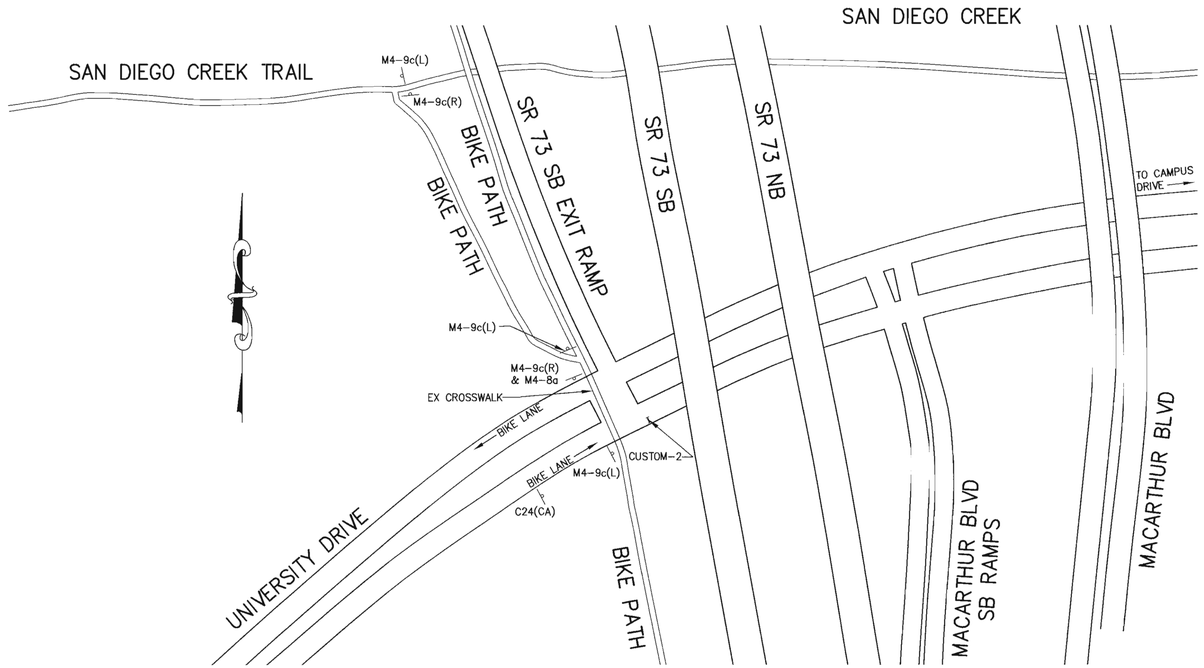
DETAIL TC-1
STAGE 1 AC RAMP PLAN VIEW DETAIL
SCALE: 1"=40'



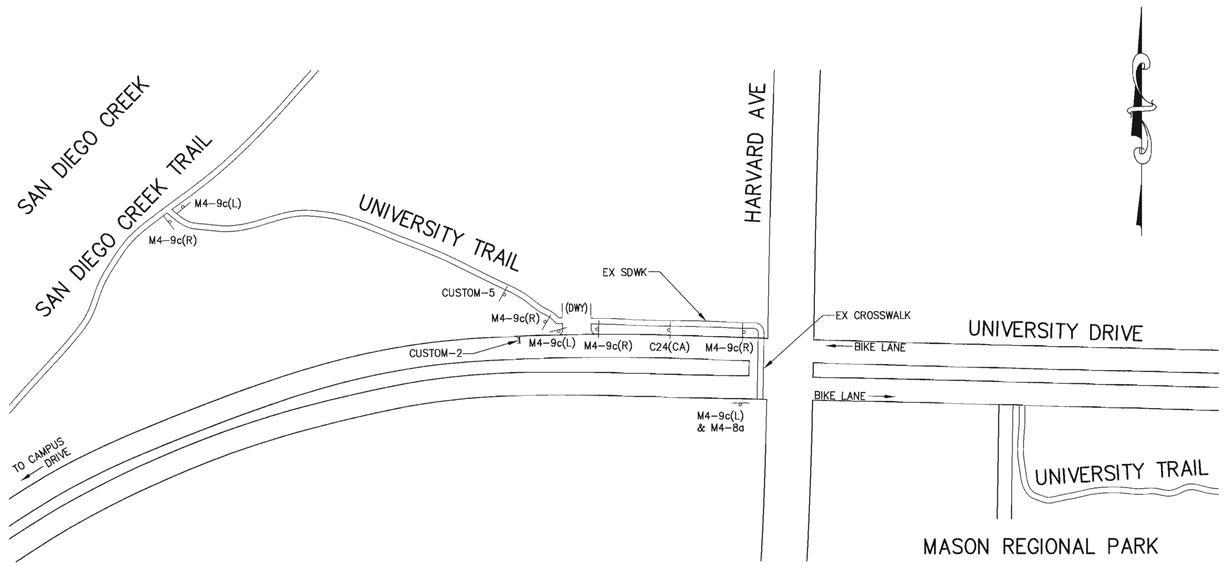
SECTION A-A
CROSS SECTION
NOT TO SCALE



SECTION B-B
PROFILE
NOT TO SCALE



DETAIL TC-2
BIKE DETOUR TRAIL ACCESS WEST END
NOT TO SCALE



DETAIL TC-3
BIKE DETOUR TRAIL ACCESS EAST END
NOT TO SCALE

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REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/19 CIVIL STATE OF CALIFORNIA

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RANDALL G. BERRY RCE #44642 DATE

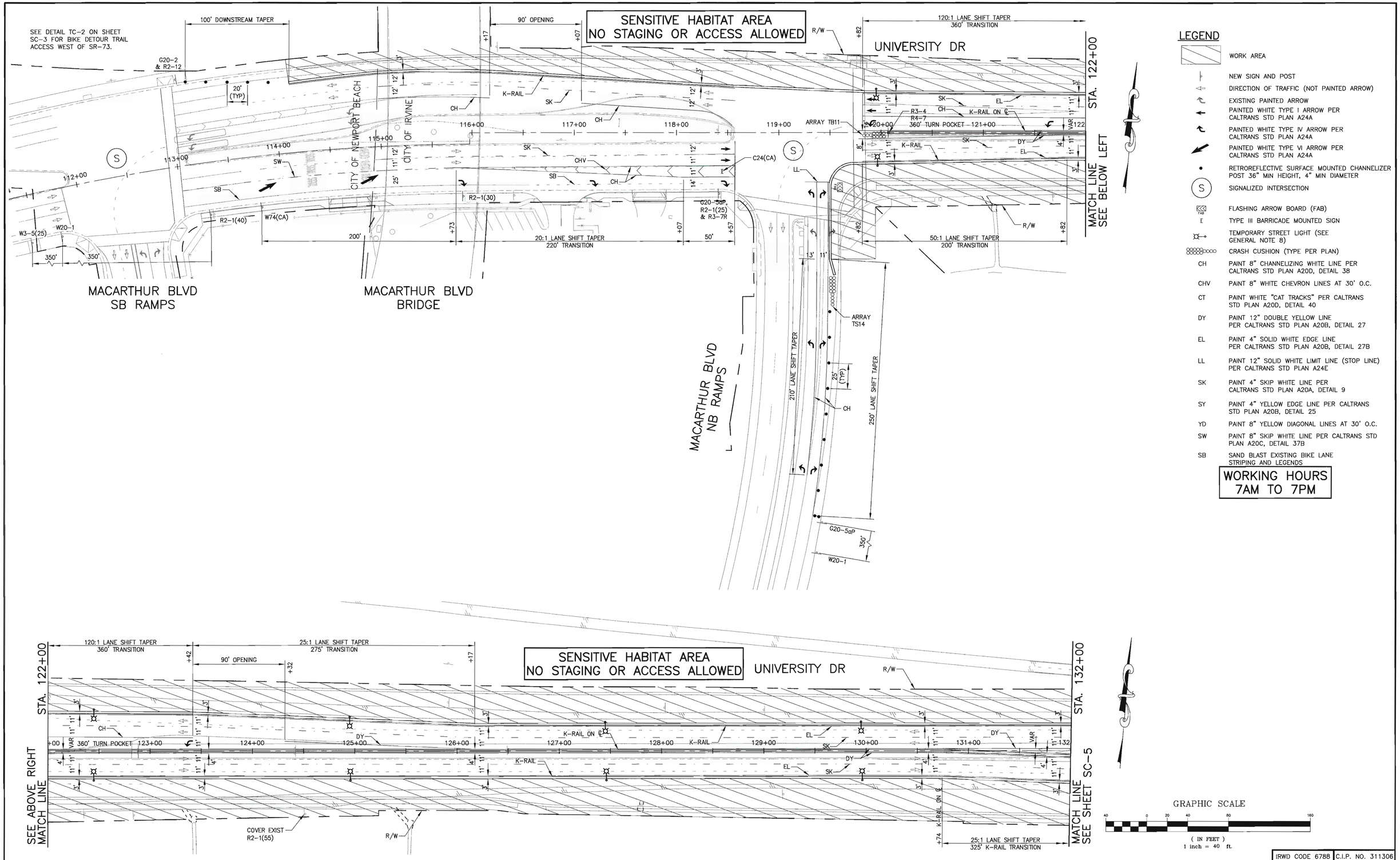
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DESIGNED BY:	MG/CM	DATE JUL 2017
CHECKED BY:	RGB	DATE JUL 2017
RECOMMENDED BY:		DATE

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STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SC-3
SHT 29 OF 87



LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
I	TYPE III BARRICADE MOUNTED SIGN
	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
	CRASH CUSHION (TYPE PER PLAN)
CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
DY	PAINT 12" DOUBLE YELLOW LINE PER CALTRANS STD PLAN A20B, DETAIL 27
EL	PAINT 4" SOLID WHITE EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 27B
LL	PAINT 12" SOLID WHITE LIMIT LINE (STOP LINE) PER CALTRANS STD PLAN A24E
SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.
SW	PAINT 8" SKIP WHITE LINE PER CALTRANS STD PLAN A20C, DETAIL 37B
SB	SAND BLAST EXISTING BIKE LANE STRIPING AND LEGENDS

WORKING HOURS
7AM TO 7PM

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

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REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
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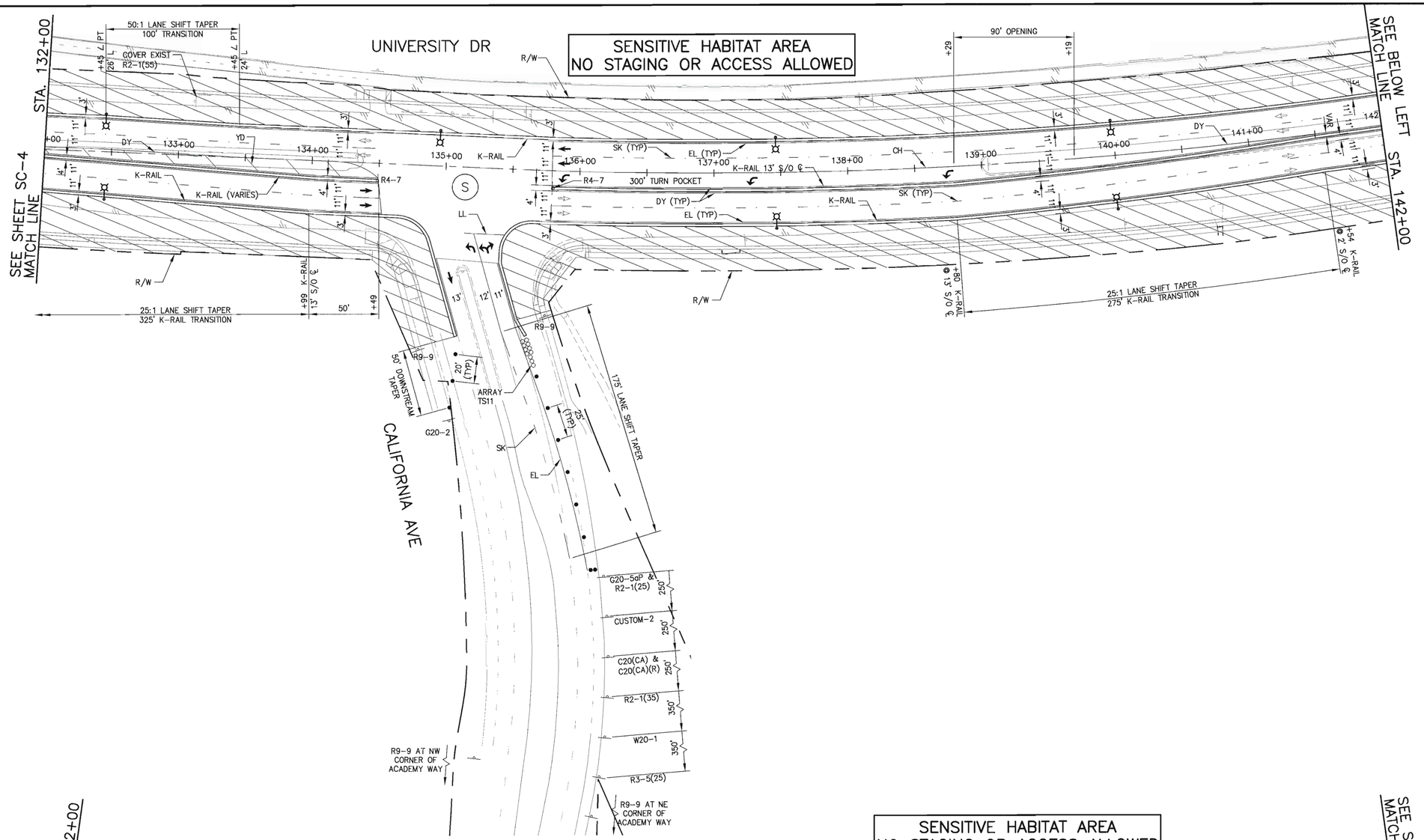
Randall Berry 7/1/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY:	GG/MG/CM	DATE JUL 2016
DESIGNED BY:	MG/CM	DATE JUL 2016
CHECKED BY:	RGB	DATE JUL 2016
RECOMMENDED BY:		DATE

STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 2
OUTSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SC-4
SHT 30 OF 87



LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
•	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
I	TYPE III BARRICADE MOUNTED SIGN
	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
	CRASH CUSHION (TYPE PER PLAN)
CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
DY	PAINT 12" DOUBLE YELLOW LINE PER CALTRANS STD PLAN A20B, DETAIL 27
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LL	PAINT 12" SOLID WHITE LIMIT LINE (STOP LINE) PER CALTRANS STD PLAN A24E
SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

WORKING HOURS
7AM TO 7PM

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

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Randall Berry 7/1/17
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STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 2
OUTSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

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PLAN CHECK NO. 00663284-EMC
SC-5
SHT 31 OF 87

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED

UNIVERSITY DR

SEE SHEET SC-11 FOR BIKE TRAIL DETOUR

SEE SHEET SC-5 MATCH LINE — STA. 152+00

SEE BELOW LEFT MATCH LINE — STA. 162+00

25:1 LANE SHIFT TAPER 275' TRANSITION

90' OPENING

200' TURN POCKET

K-RAIL (VARIES)

K-RAIL @ 5' S/O ℄

K-RAIL @ 2' S/O ℄

50:1 LANE SHIFT TAPER 150' K-RAIL TRANSITION

WARNING! SHALLOW 18"/24" RECLAIMED WATER LINE IN MEDIAN. PROTECT AT ALL TIMES. SEE DETAIL TC-1 ON SHEET SC-3, AND SECTION Z-Z ON SHEET X-2.

SEE SHEET SC-3 FOR AC RAMP DETAIL

MESA RD

50' DOWNSTREAM TAPER

ARRAY TS11

PAINT CAT TRACKS

G20-2

R9-9

W20-1

G20-5aP & R2-1(25)

CUSTOM-2

C20(CA) & C20A(CA)(R)

W3-5a(25)

LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
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	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
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SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

WORKING HOURS
7AM TO 7PM

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED

CAMPUS DR

SEE SHEET SC-7 MATCH LINE — STA. 299+18

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED

UNIVERSITY DR

SEE DETAIL TC-3 ON SHEET SC-3 FOR BIKE DETOUR TRAIL ACCESS WEST OF HARVARD AVE.

SEE ABOVE RIGHT MATCH LINE — STA. 162+00

COVER EXIST R2-1(55)

EXIST R/W

25:1 LANE SHIFT TAPER 100' TRANSITION

220' TURN POCKET

K-RAIL @ 5' S/O ℄

PROTECT EX MEDIAN

PROTECT EX STRIPING

ARRAY TS11

PAINT 6" WHITE E.L.

250' LANE MERGE TAPER

100' DOWNSTREAM TAPER

R9-9 AT SW CORNER OF HARVARD AVE

G20-2 & R2-12

G20-5aP & R2-1(25)

W4-2R

C20(CA) & C20A(CA)(R)

R2-1(30)

R2-1(40)

W20-1

W3-5(25)

25:1 LANE SHIFT TAPER 275' TRANSITION

MATCH LINE — STA. 300+95 SEE SHEET SC-7 CAMPUS DR

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

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PLAN PREPARED BY:
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RANDALL G. BERRY RCE #44642 — DATE 7/7/17

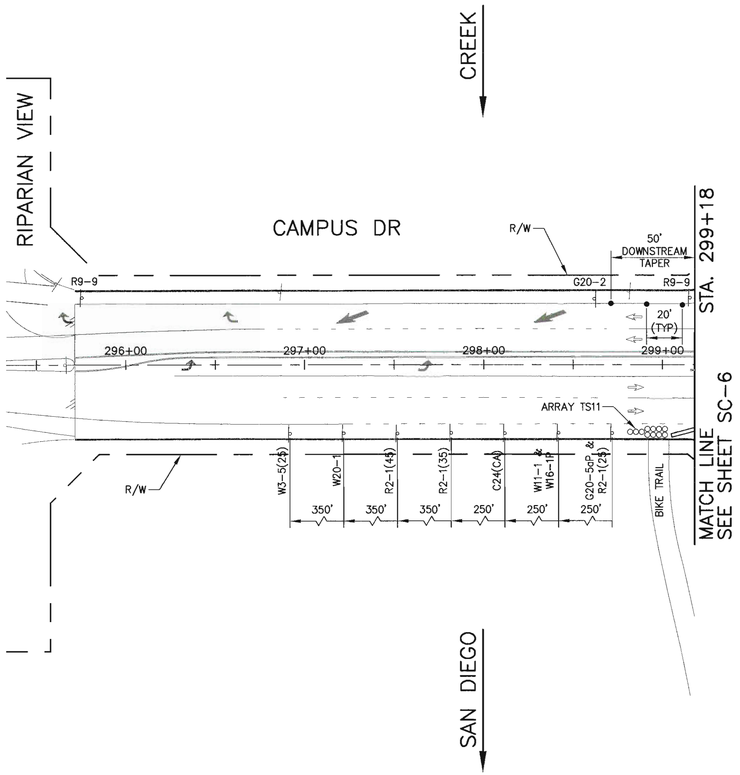
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STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 2
OUTSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

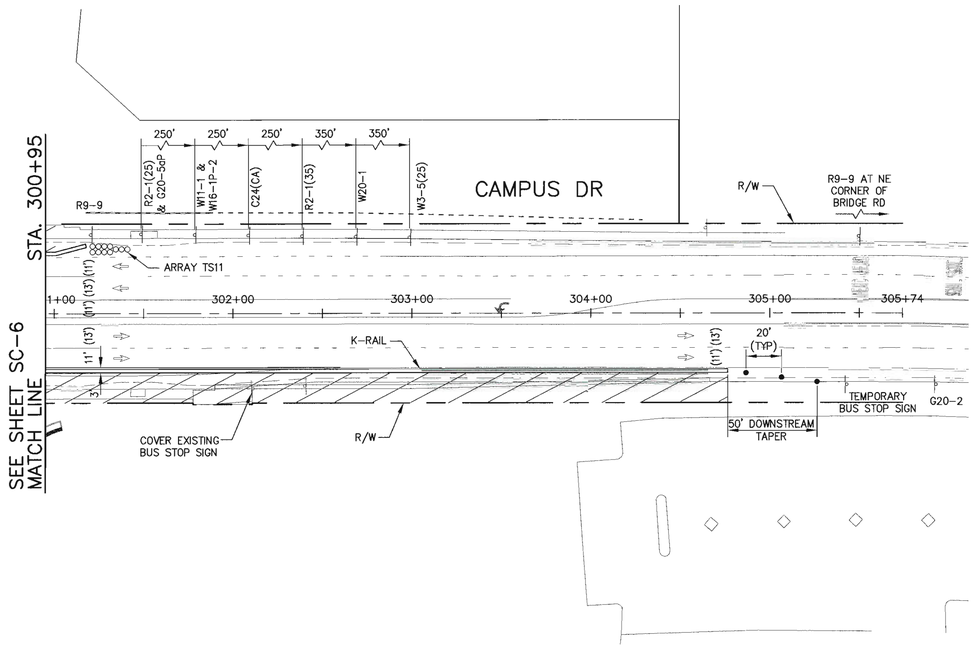
PLAN CHECK NO. 00663284-EMC

SC-6

SHT 32 OF 87



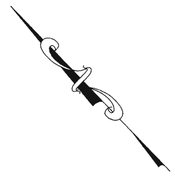
UNIVERSITY DR



LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
I	TYPE III BARRICADE MOUNTED SIGN
	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
	CRASH CUSHION (TYPE PER PLAN)
CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
DY	PAINT 12" DOUBLE YELLOW LINE PER CALTRANS STD PLAN A20B, DETAIL 27
EL	PAINT 4" SOLID WHITE EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 27B
LL	PAINT 12" SOLID WHITE LIMIT LINE (STOP LINE) PER CALTRANS STD PLAN A24E
SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

WORKING HOURS
7AM TO 7PM



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/1/17
RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 2
OUTSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

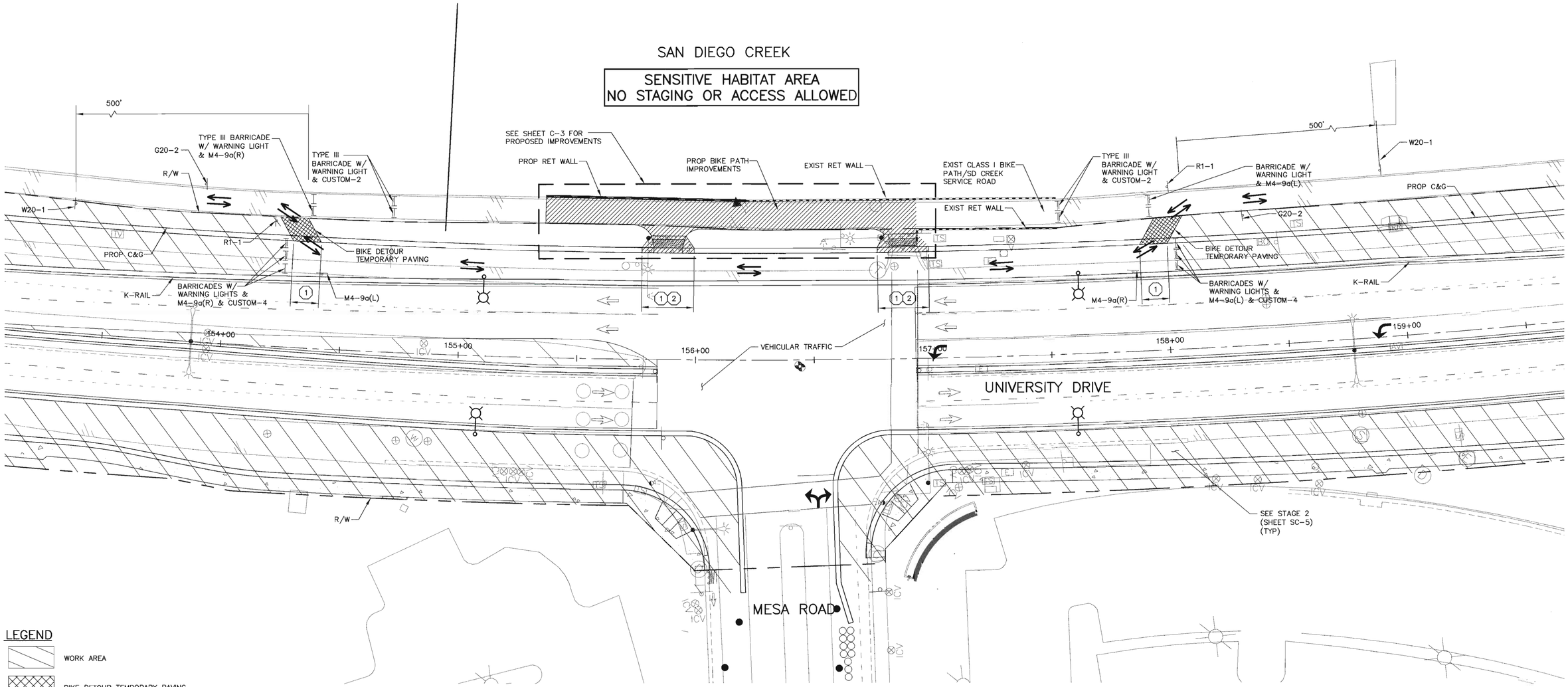
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PLAN CHECK NO. 00663284-EMC

SC-7
SHT 33 OF 87

SAN DIEGO CREEK

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED



LEGEND

- WORK AREA
- BIKE DETOUR TEMPORARY PAVING
- NEW SIGN AND POST
- DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
- EXISTING PAINTED ARROW
- PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
- PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
- PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
- RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
- (S) SIGNALIZED INTERSECTION
- FAB FLASHING ARROW BOARD (FAB)
- I TYPE III BARRICADE MOUNTED SIGN
- TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
- CRASH CUSHION (TYPE PER PLAN)

CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
DY	PAINT 12" DOUBLE YELLOW LINE PER CALTRANS STD PLAN A20B, DETAIL 27
EL	PAINT 4" SOLID WHITE EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 27B
SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.
⇄	BIKE/PEDESTRIAN TRAFFIC DURING DETOUR
(1)	OMIT PERMANENT CURB & GUTTER DURING ADJACENT CURB & GUTTER CONSTRUCTION PROCESS (DURING STAGE 2).
(2)	OMIT PERMANENT TRAIL ACCESS RAMP DURING ADJACENT CURB & GUTTER CONSTRUCTION PROCESS (DURING STAGE 2).

WORKING HOURS
7AM TO 7PM*

* WORK SHALL BE PERFORMED AS A SUB-STAGE (STAGE 2B) TO STAGE 2 UPON COMPLETION OF STAGE 2 WIDENING, WITH EXCEPTION OF WORK NOTED IN (1) & (2).

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
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Randall Berry 7/7/17
*RANDALL G. BERRY RCE #44642 DATE

		DATE
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DESIGNED BY:	MG/CM	JUL 2017
CHECKED BY:	RGB	JUL 2017
RECOMMENDED BY:		DATE

IRWD CODE 6788 | C.I.P. NO. 311306

STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 2B
BIKE TRAIL/SERVICE ROAD DETOUR
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SC-8
SHT 34 OF 87

SEE DETAIL TC-2 ON SHEET SC-3 FOR BIKE DETOUR TRAIL ACCESS WEST OF SR-73.

100' DOWNSTREAM TAPER

G20-2 & R2-12

CITY OF NEWPORT BEACH

CITY OF IRVINE

UNIVERSITY DR

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED

MACARTHUR BLVD SB RAMPS

MACARTHUR BLVD BRIDGE

MACARTHUR BLVD NB RAMPS

250' LANE MERGE TAPER

360' TURN POCKET

STA. 122+00

MATCH LINE SEE BELOW LEFT

NOTE: THIS WORK MAY BE PERFORMED AS A SEPARATE SUB-STAGE AND/OR AS PART OF A SEPARATE INTERSECTION NIGHT WORK STAGE 3A.

50' DOWNSTREAM TAPER

25:1 LANE SHIFT TAPER 120' TRANSITION

25:1 LANE SHIFT TAPER 200' TRANSITION

LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
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SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.
NB	PAINT 50' LONG PAINTED 4-INCH WIDE WHITE LEAD LINE WITH ONE TYPE G CLEAR RETROREFLECTIVE PAVEMENT MARKER AT EACH END PER DETAIL 1 ON SHEET PDS-1

WORKING HOURS 7AM TO 7PM

SENSITIVE HABITAT AREA
NO STAGING OR ACCESS ALLOWED

90' OPENING K-RAIL TRANSITION

BIKE TRAIL

STA. 122+00

STA. 132+00

SEE ABOVE RIGHT MATCH LINE

MATCH LINE SEE SHEET SC-10

COVER EXIST R2-1(55)

25:1 LANE SHIFT TAPER
290' K-RAIL TRANSITION

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

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REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

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Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

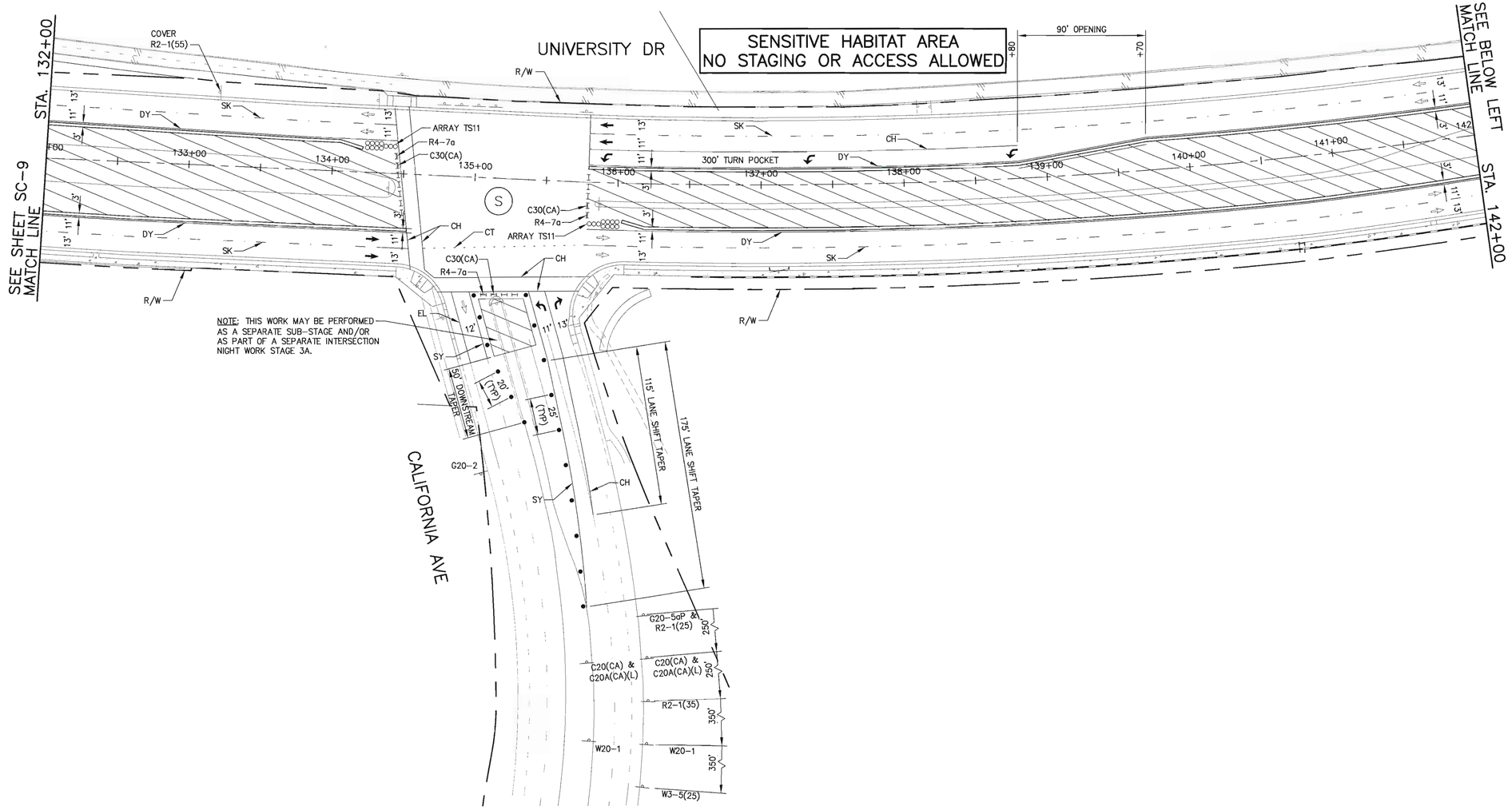
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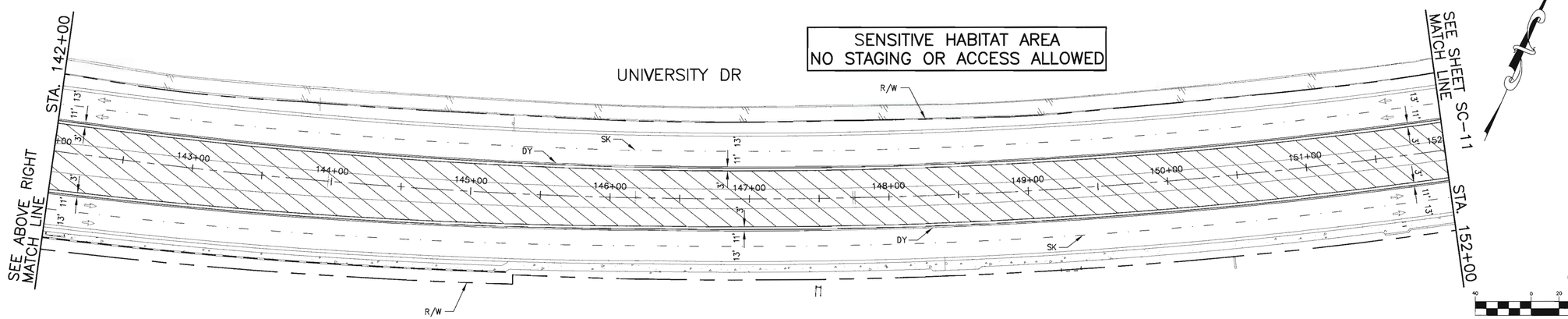
STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 3
INSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SC-9

SHT 35 OF 87





LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
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	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
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SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

WORKING HOURS 7AM TO 7PM

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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7					
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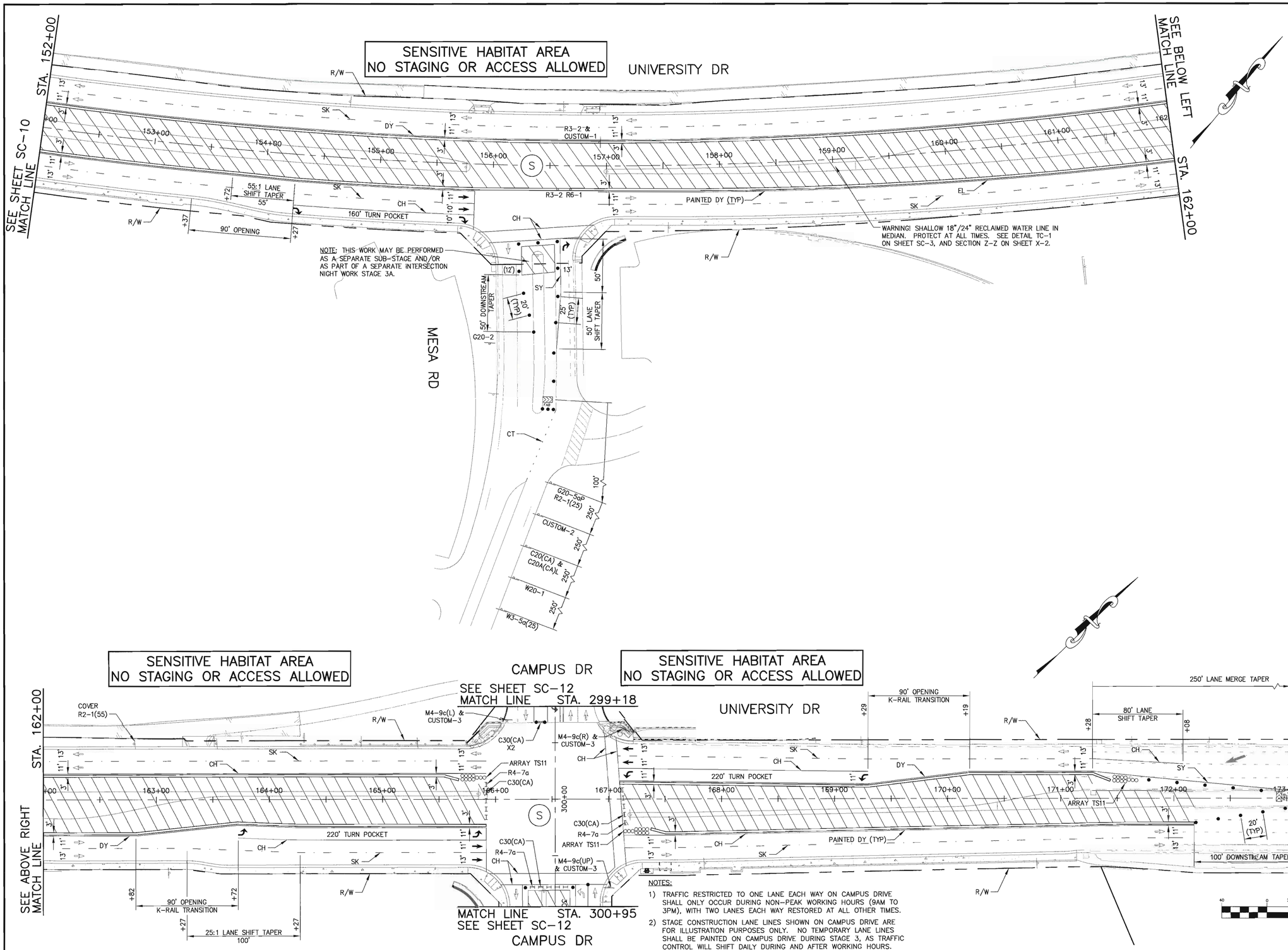
REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

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RANDALL G. BERRY RCE #44642 DATE

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STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 3
INSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306
PLAN CHECK NO. 00663284-EMC
SC-10
SHT 36 OF 87



LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE IV ARROW PER CALTRANS STD PLAN A24A
	PAINTED WHITE TYPE VI ARROW PER CALTRANS STD PLAN A24A
	RETROREFLECTIVE SURFACE MOUNTED CHANNELIZER POST 36" MIN HEIGHT, 4" MIN DIAMETER
S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
I	TYPE III BARRICADE MOUNTED SIGN
	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
	CRASH CUSHION (TYPE PER PLAN)
CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
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LL	PAINT 12" SOLID WHITE LIMIT LINE (STOP LINE) PER CALTRANS STD PLAN A24E
SK	PAINT 4" SKIP WHITE LINE PER CALTRANS STD PLAN A20A, DETAIL 9
SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

NOTES:

1) TRAFFIC RESTRICTED TO ONE LANE EACH WAY ON CAMPUS DRIVE SHALL ONLY OCCUR DURING NON-PEAK WORKING HOURS (9AM TO 3PM), WITH TWO LANES EACH WAY RESTORED AT ALL OTHER TIMES.
2) STAGE CONSTRUCTION LANE LINES SHOWN ON CAMPUS DRIVE ARE FOR ILLUSTRATION PURPOSES ONLY. NO TEMPORARY LANE LINES SHALL BE PAINTED ON CAMPUS DRIVE DURING STAGE 3, AS TRAFFIC CONTROL WILL SHIFT DAILY DURING AND AFTER WORKING HOURS.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
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22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
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RANDALL G. BERRY RCE #44642 DATE

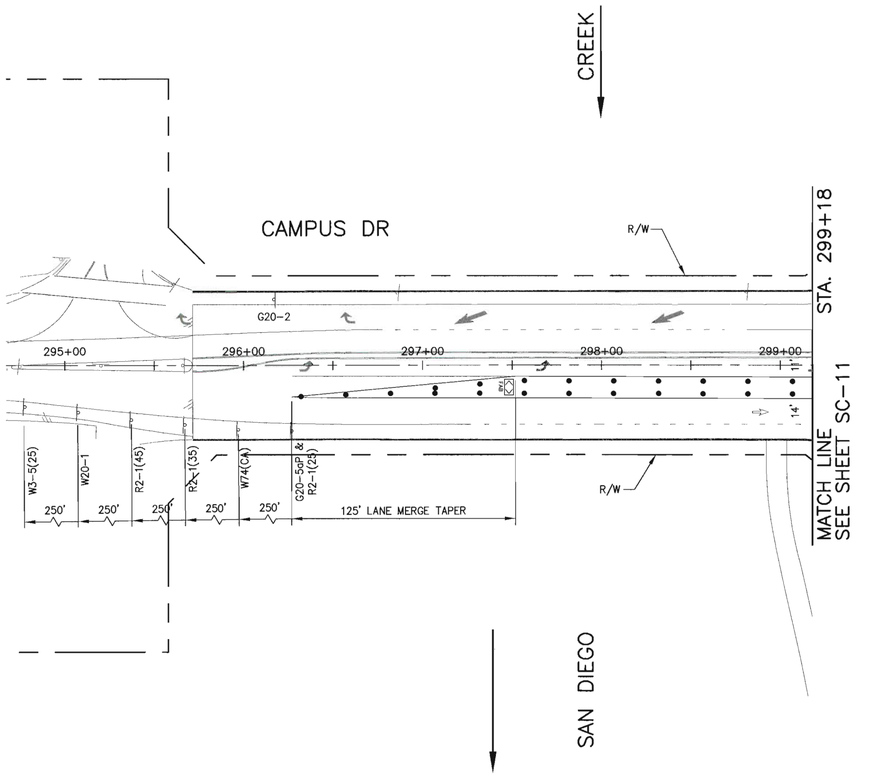
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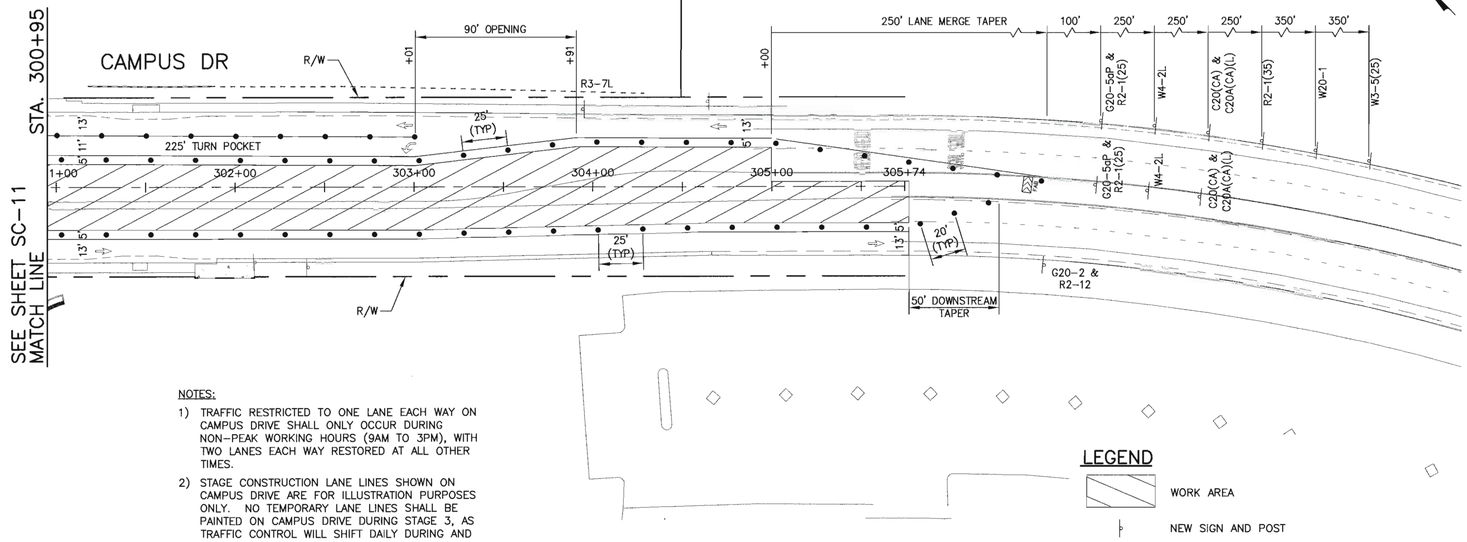
IRWD CODE 6788 | C.I.P. NO. 311306

STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 3
INSIDE CONSTRUCTION
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SC-11
SHT 37 OF 87





NOTES:

1) TRAFFIC RESTRICTED TO ONE LANE EACH WAY ON CAMPUS DRIVE SHALL ONLY OCCUR DURING NON-PEAK WORKING HOURS (9AM TO 3PM), WITH TWO LANES EACH WAY RESTORED AT ALL OTHER TIMES.
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LEGEND

	WORK AREA
	NEW SIGN AND POST
	DIRECTION OF TRAFFIC (NOT PAINTED ARROW)
	EXISTING PAINTED ARROW
	PAINTED WHITE TYPE I ARROW PER CALTRANS STD PLAN A24A
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S	SIGNALIZED INTERSECTION
FAB	FLASHING ARROW BOARD (FAB)
	TYPE III BARRICADE MOUNTED SIGN
	TEMPORARY STREET LIGHT (SEE GENERAL NOTE 8)
	CRASH CUSHION (TYPE PER PLAN)
CH	PAINT 8" CHANNELIZING WHITE LINE PER CALTRANS STD PLAN A20D, DETAIL 38
CHV	PAINT 8" WHITE CHEVRON LINES AT 30' O.C.
CT	PAINT WHITE "CAT TRACKS" PER CALTRANS STD PLAN A20D, DETAIL 40
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SY	PAINT 4" YELLOW EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 25
YD	PAINT 8" YELLOW DIAGONAL LINES AT 30' O.C.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

WORKING HOURS 7AM TO 7PM

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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

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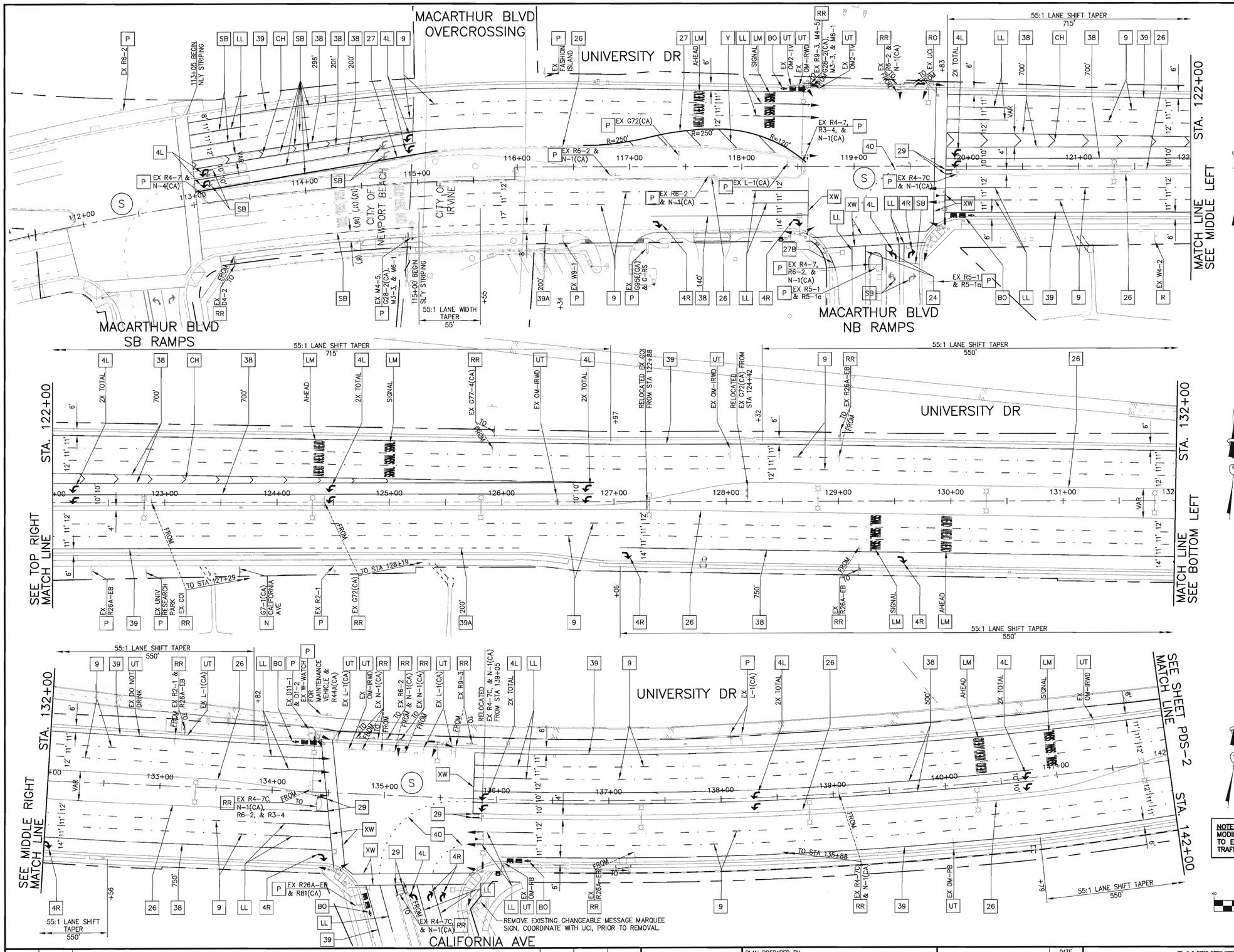
STAGE CONSTRUCTION
UNIVERSITY DRIVE WIDENING
STAGE 3
INSIDE CONSTRUCTION
CITY OF IRVINE
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IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SC-12

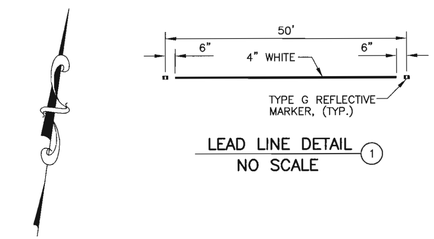
SHT 38 OF 87



STRIPING & SIGNAGE NOTES:

- BO — INSTALL PAINTED WHITE "BIKE ONLY" PAVEMENT LEGENDS AND BIKE LANE ARROW (CITY STENCIL OR EXACT EQUAL).
- CH — INSTALL PAINTED 12-INCH WIDE WHITE CHEVRON LINES AT 30' SPACING.
- LL — INSTALL 50' LONG PAINTED 4-INCH WIDE WHITE LEAD LINE WITH ONE TYPE G CLEAR RETROREFLECTIVE PAVEMENT MARKER AT EACH END PER DETAIL 1 ON SHEET PDS-1.
- LM — INSTALL PAINTED PAVEMENT LEGEND MARKINGS AS SHOWN ON PLAN (CITY STENCIL OR EXACT EQUAL).
- N — INSTALL NEW SIGN. SIGN TYPE AND LOCATION AS SHOWN ON PLAN.
- P — PROTECT EXISTING SIGN IN-PLACE.
- R — REMOVE EXISTING SIGN.
- RO — REMOVE AND RELOCATE EXISTING SIGN BY OTHERS. LOCATION SHOWN ON PLAN.
- RR — REMOVE AND RELOCATE EXISTING SIGN. LOCATION SHOWN ON PLAN.
- SB — SAND BLAST CONFLICTING EXISTING STRIPING.
- UT — REMOVE AND RELOCATE EXISTING SIGN TO LOCATION OF RELOCATED UTILITY.
- XW — INSTALL PAINTED 12-INCH WIDE WHITE LIMIT LINE OR CROSSWALK. IF APPLICABLE, INSTALL 12-INCH WIDE CORNER CROSSWALK STRIPING PER CITY STANDARD PLAN 203.
- Y — INSTALL PAINTED 12-INCH WIDE YELLOW LINE AT 30' SPACING.
- 4L — INSTALL PAINTED WHITE TYPE IV (L) PAVEMENT ARROW (LEFT) (CITY STENCIL OR EXACT EQUAL).
- 4R — INSTALL PAINTED WHITE TYPE IV (R) PAVEMENT ARROW (RIGHT) (CITY STENCIL OR EXACT EQUAL).
- 9 — INSTALL PAINTED 4-INCH WIDE WHITE SKIP LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20A, DETAIL 9.
- 24 — INSTALL PAINTED 4-INCH WIDE YELLOW EDGE LINE PER CALTRANS STANDARD PLAN A20B, DETAIL 24.
- 26 — INSTALL REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 26.
- 27 — INSTALL PAINTED 4-INCH WIDE DOUBLE YELLOW EDGE LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 27.
- 27B — INSTALL PAINTED 4-INCH WIDE WHITE EDGE LINE PER CALTRANS STANDARD PLAN A20B, DETAIL 27B.
- 29 — INSTALL PAINTED 4-INCH WIDE DOUBLE YELLOW CENTERLINE MEDIAN AND RAISED PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 29.
- 38 — INSTALL PAINTED 8-INCH WIDE WHITE CHANNELLIZING LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20D, DETAIL 38.
- 39 — INSTALL PAINTED 6-INCH WIDE WHITE BIKE LANE LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39.
- 39A — INSTALL PAINTED 6-INCH WIDE WHITE SKIP BIKE LANE INTERSECTION LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39A.
- 40 — INSTALL PAINTED 4-INCH WIDE WHITE LANE LINE EXTENSION THROUGH INTERSECTIONS PER CALTRANS STANDARD PLAN A20D, DETAIL 40.
- (S) — SIGNALIZED INSTERSECTION – SEE TRAFFIC SIGNAL MODIFICATION PLANS FOR SIGNAL DETAILS.

NOTE: SEE SHEET PDS-3 FOR SIGNING & STRIPING GENERAL NOTES.



LEAD LINE DETAIL (1)
NO SCALE

NOTE: SEE TRAFFIC SIGNAL MODIFICATION PLAN SHEETS E-1 TO E-4 FOR NEW ADVANCED TRAFFIC SIGNAL LOOP LOCATIONS

GRAPHIC SCALE
40 0 20 40 60 160
(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

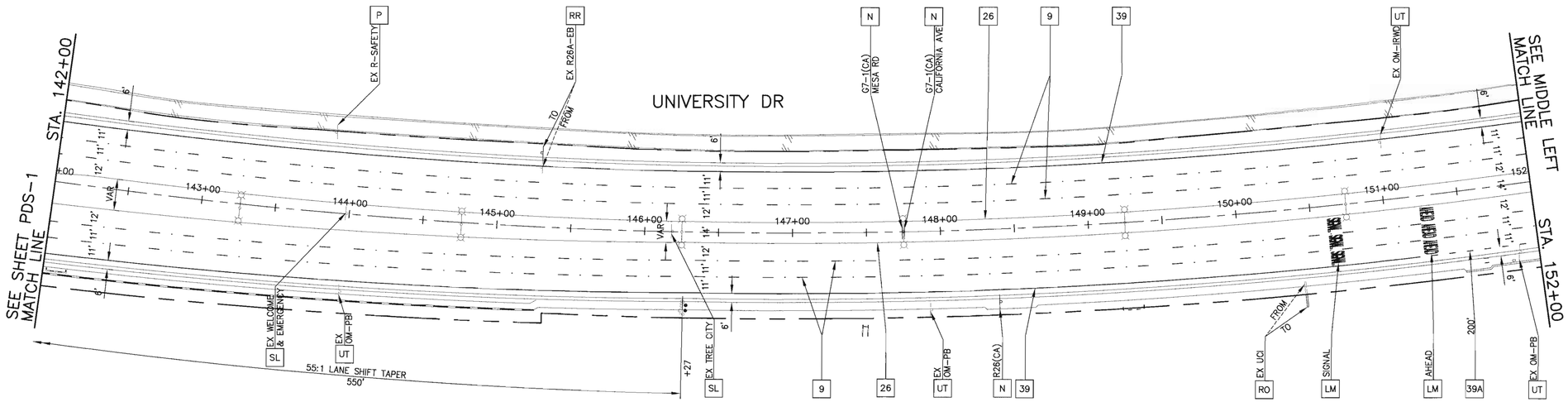
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995

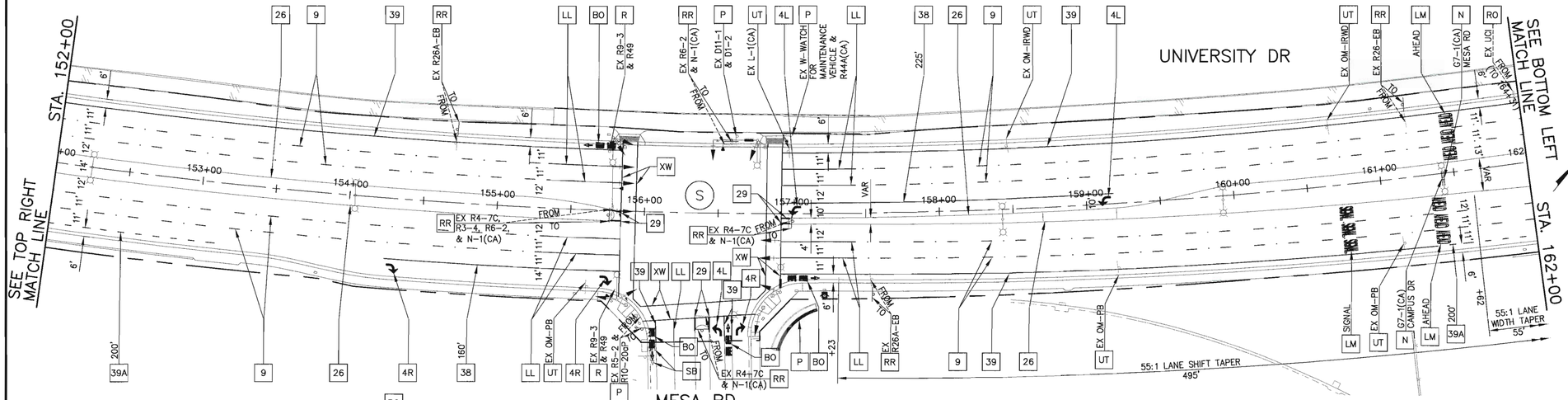
Randall Berry 7/1/17
RANDALL G. BERRY RCE #44642 DATE

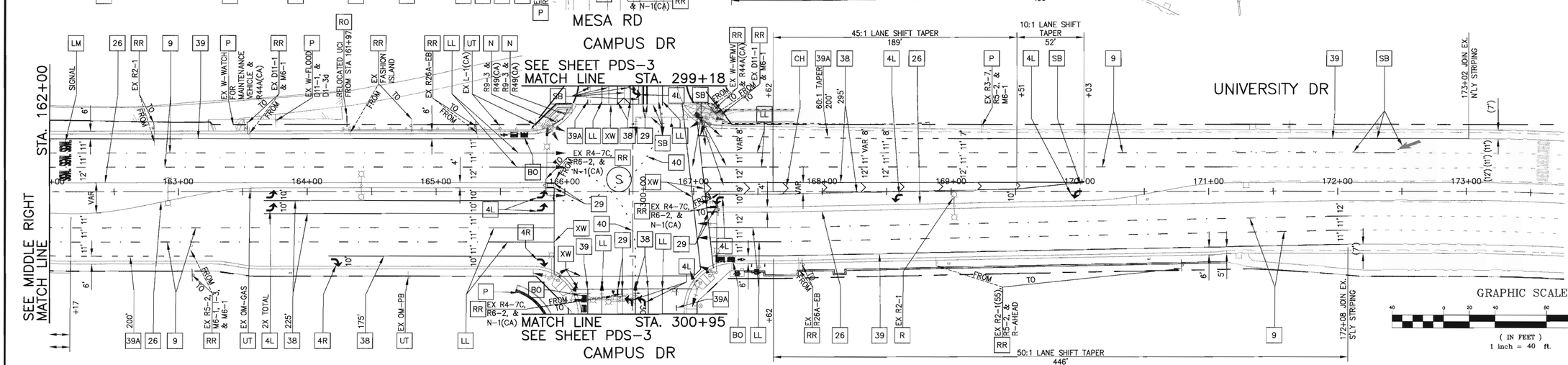
		DATE
DRAWN BY:	CG/MG/CM	JUL. 2016
DESIGNED BY:	MG/CM	JUL. 2016
CHECKED BY:	RGB	JUL. 2016
RECOMMENDED BY:		DATE

PAVEMENT DELINEATION AND SIGNS
UNIVERSITY DRIVE WIDENING
UNIVERSITY DRIVE
STA 113+05 TO 142+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306
PLAN CHECK NO. 00663284-EMC
PDS-1
SHT 39 OF 87







STRIPING & SIGNAGE NOTES:

BO	INSTALL PAINTED WHITE "BIKE ONLY" PAVEMENT LEGENDS AND BIKE LANE ARROW (CITY STENCIL OR EXACT EQUAL).
CH	INSTALL PAINTED 12–INCH WIDE WHITE CHEVRON LINES AT 30' SPACING.
LL	INSTALL 50' LONG PAINTED 4–INCH WIDE WHITE LEAD LINE WITH ONE TYPE G CLEAR RETROREFLECTIVE PAVEMENT MARKER AT EACH END PER DETAIL 1 ON SHEET PDS–1.
LM	INSTALL PAINTED PAVEMENT LEGEND MARKINGS AS SHOWN ON PLAN (CITY STENCIL OR EXACT EQUAL).
N	INSTALL NEW SIGN. SIGN TYPE AND LOCATION AS SHOWN ON PLAN.
P	PROTECT EXISTING SIGN IN–PLACE.
R	REMOVE EXISTING SIGN.
RO	REMOVE AND RELOCATE EXISTING SIGN BY OTHERS. LOCATION SHOWN ON PLAN.
RR	REMOVE AND RELOCATE EXISTING SIGN. LOCATION SHOWN ON PLAN.
SB	SAND BLAST CONFLICTING EXISTING STRIPING.
SL	REMOVE AND RELOCATE EXISTING SIGN ON EXISTING STREET LIGHT. RELOCATE TO NEAREST NEW STREET LIGHT PER STREET LIGHT PLANS.
UT	REMOVE AND RELOCATE EXISTING SIGN TO LOCATION OF RELOCATED UTILITY.
XW	INSTALL PAINTED 12–INCH WIDE WHITE LIMIT LINE OR CROSSWALK. IF APPLICABLE, INSTALL 12–INCH WIDE CORNER CROSSWALK STRIPING PER CITY STANDARD PLAN 203.
4L	INSTALL PAINTED WHITE TYPE IV (L) PAVEMENT ARROW (LEFT) (CITY STENCIL OR EXACT EQUAL).
4R	INSTALL PAINTED WHITE TYPE IV (R) PAVEMENT ARROW (RIGHT) (CITY STENCIL OR EXACT EQUAL).
9	INSTALL PAINTED 4–INCH WIDE WHITE SKIP LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20A, DETAIL 9.
26	INSTALL REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 26.
29	INSTALL PAINTED 4–INCH WIDE DOUBLE YELLOW CENTERLINE MEDIAN AND RAISED PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 29.
38	INSTALL PAINTED 8–INCH WIDE WHITE CHANNELLIZING LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20D, DETAIL 38.
39	INSTALL PAINTED 6–INCH WIDE WHITE BIKE LANE LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39.
39A	INSTALL PAINTED 6–INCH WIDE WHITE SKIP BIKE LANE INTERSECTION LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39A.
40	INSTALL PAINTED 4–INCH WIDE WHITE LANE LINE EXTENSION THROUGH INTERSECTIONS PER CALTRANS STANDARD PLAN A20D, DETAIL 40.
S	SIGNALIZED INSTERSECTION – SEE TRAFFIC SIGNAL MODIFICATION PLANS FOR SIGNAL DETAILS.

NOTE: SEE SHEET PDS–3 FOR SIGNING & STRIPING GENERAL NOTES.

NOTE: SEE TRAFFIC SIGNAL MODIFICATION PLAN SHEETS E–1 TO E–4 FOR NEW ADVANCED TRAFFIC SIGNAL LOOP LOCATIONS

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655–3900 • FAX: (949) 655–3995

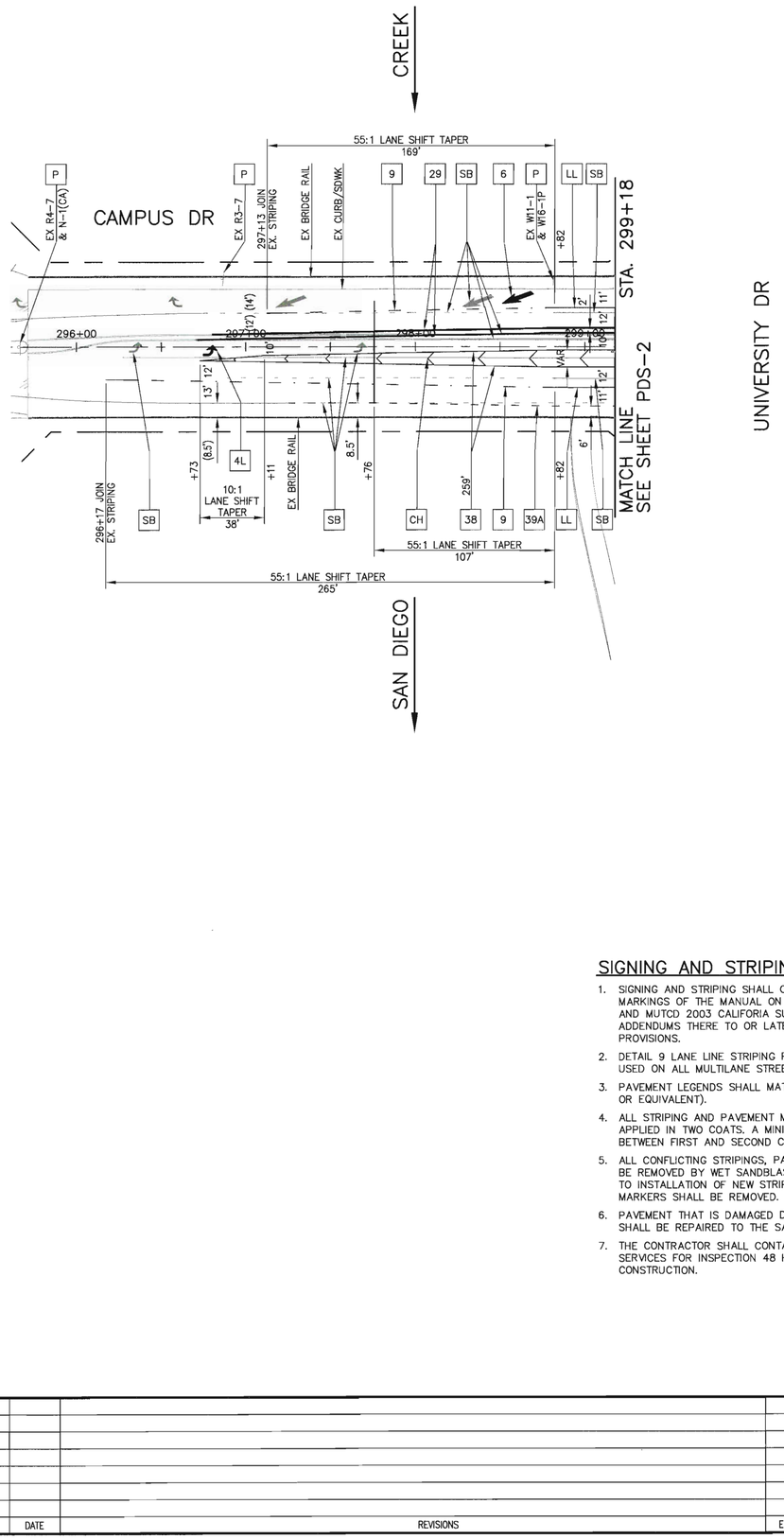
RANDALL G. BERRY RCE #44642 — DATE 7/7/17

DRAWN BY: GG/MG/CM	DATE	JUL 2017
DESIGNED BY: MG/CM	DATE	JUL 2017
CHECKED BY: RGB	DATE	JUL 2017
RECOMMENDED BY:	DATE	

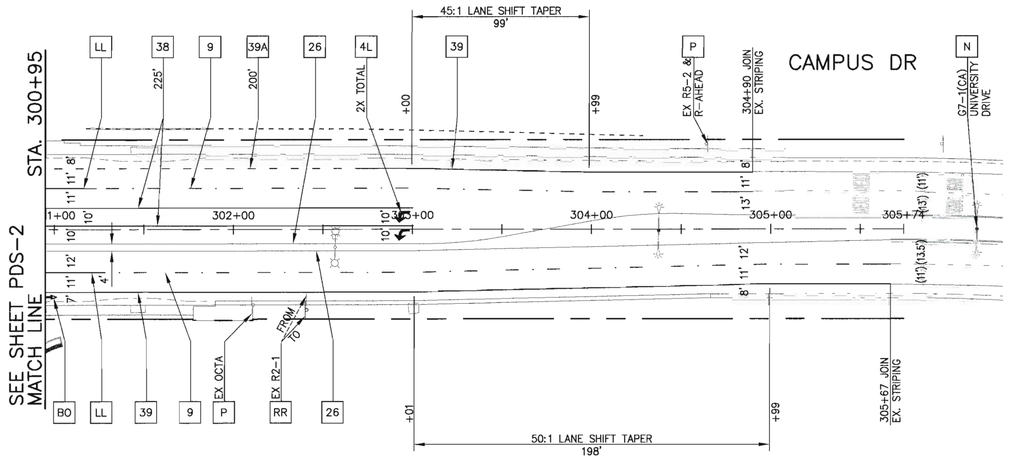
PAVEMENT DELINEATION AND SIGNS
UNIVERSITY DRIVE WIDENING
UNIVERSITY DRIVE
STA 142+00 TO 173+02
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

PDS–2
SHT 40 OF 87



UNIVERSITY DR



STRIPING & SIGNAGE NOTES:

BO	INSTALL PAINTED WHITE "BIKE ONLY" PAVEMENT LEGENDS AND BIKE LANE ARROW (CITY STENCIL OR EXACT EQUAL).
CH	INSTALL PAINTED 12-INCH WIDE WHITE CHEVRON LINES AT 30' SPACING.
LL	INSTALL 50' LONG PAINTED 4-INCH WIDE WHITE LEAD LINE WITH ONE TYPE G CLEAR RETROREFLECTIVE PAVEMENT MARKER AT EACH END PER DETAIL 1 ON SHEET PDS-1.
N	INSTALL NEW SIGN. SIGN TYPE AND LOCATION AS SHOWN ON PLAN.
P	PROTECT EXISTING SIGN IN-PLACE.
RR	REMOVE AND RELOCATE EXISTING SIGN. LOCATION SHOWN ON PLAN.
SB	SAND BLAST CONFLICTING EXISTING STRIPING.
XW	INSTALL PAINTED 12-INCH WIDE WHITE LIMIT LINE OR CROSSWALK. IF APPLICABLE, INSTALL 12-INCH WIDE CORNER CROSSWALK STRIPING PER CITY STANDARD PLAN 203.
4L	INSTALL PAINTED WHITE TYPE IV (L) PAVEMENT ARROW (LEFT) (CITY STENCIL OR EXACT EQUAL).
6	INSTALL PAINTED WHITE TYPE VI PAVEMENT ARROW (CITY STENCIL OR EXACT EQUAL).
9	INSTALL PAINTED 4-INCH WIDE WHITE SKIP LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20A, DETAIL 9.
26	INSTALL REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 26.
29	INSTALL PAINTED 4-INCH WIDE DOUBLE YELLOW CENTERLINE MEDIAN AND RAISED PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20B, DETAIL 29.
38	INSTALL PAINTED 8-INCH WIDE WHITE CHANNELLIZING LINE AND REFLECTIVE PAVEMENT MARKERS PER CALTRANS STANDARD PLAN A20D, DETAIL 38.
39	INSTALL PAINTED 6-INCH WIDE WHITE BIKE LANE LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39.
39A	INSTALL PAINTED 6-INCH WIDE WHITE SKIP BIKE LANE INTERSECTION LINE, PER CALTRANS STANDARD PLAN A20D, DETAIL 39A.

SIGNING AND STRIPING GENERAL NOTES:

1. SIGNING AND STRIPING SHALL CONFORM TO PART 2 SIGNS & PART 3 MARKINGS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND MUTCD 2003 CALIFORIA SUPPLEMENT DATED MAY 20, 2004, AND ANY ADDENDUMS THERE TO OR LATEST EDITION, THESE PLANS AND SPECIAL PROVISIONS.
2. DETAIL 9 LANE LINE STRIPING PATTERN IN PART 3 MARKINGS SHALL BE USED ON ALL MULTILANE STREETS REGARDLESS OF STREET DESIGN SPEED.
3. PAVEMENT LEGENDS SHALL MATCH THE CITY STENCILS (HAWKINS STENCILS OR EQUIVALENT).
4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED AND APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.
5. ALL CONFLICTING STRIPINGS, PAVMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO INSTALLATION OF NEW STRIPING. ALL CONFLICTING RAISED PAVEMENT MARKERS SHALL BE REMOVED.
6. PAVEMENT THAT IS DAMAGED DUE TO REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY INSPECTOR.
7. THE CONTRACTOR SHALL CONTACT THE CITY OF IRVINE INSPECTION SERVICES FOR INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. IF CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON THESE PLANS, THE CITY OF IRVINE INSPECTION SERVICES SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
9. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
10. STRIPING SHALL BE CAT TRACKED AND APPROVED BY THE CITY INSPECTOR PRIOR TO FINAL INSTALLATION.
11. CROSSWALK SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN NO. 203.
12. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.
13. ALL SIGN POSTS SHALL BE 4"X4" REDWOOD STAINED "IRVINE BROWN" PER THE CITY OF IRVINE REQUIREMENTS. CITY OF IRVINE SPECIAL SIGN R26EB SIGN SHALL BE INSTALLED ON "U" CHANNEL POST OR ON STREET LIGHT POLE.
14. ADVANCED STREET NAME SIGNS AND STREET NAME SIGNS SHALL BE SILVER LETTERS WITH "IRVINE BROWN" BACKGROUND.
15. BLUE RAISED REFLECTIVE PAVEMENT MARKER SHALL BE INSTALLED ADJACENT TO ALL EXISTING FIRE HYDRANTS IN ACCORDANCE WITH MUTCD 2003 CALIFORNIA SUPPLEMENT.

NOTE: SEE TRAFFIC SIGNAL MODIFICATION PLAN SHEETS E-1 TO E-4 FOR NEW ADVANCED TRAFFIC SIGNAL LOOP LOCATIONS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/1/17
RANDALL G. BERRY RCE #44642 DATE

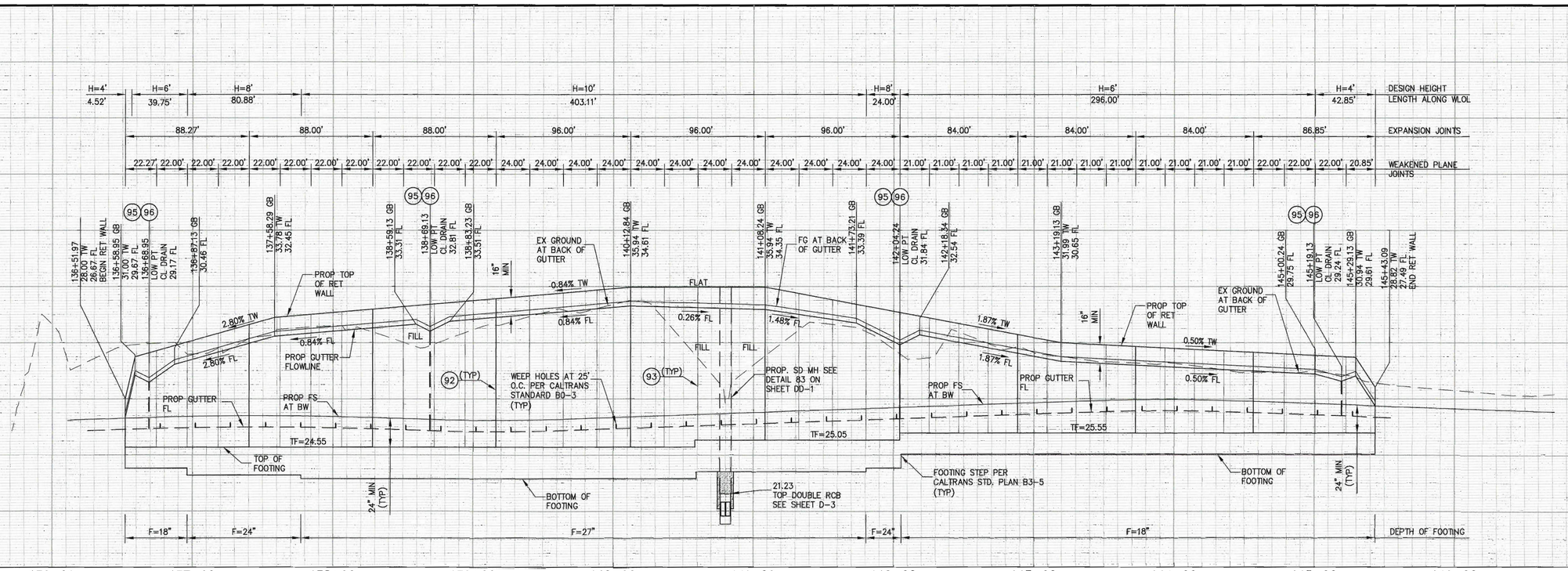
		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

PAVEMENT DELINEATION AND SIGNS
UNIVERSITY DRIVE WIDENING
CAMPUS DRIVE
STA 296+17 TO 305+67
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

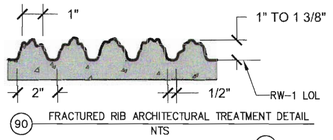
PDS-3

SHT 41 OF 87

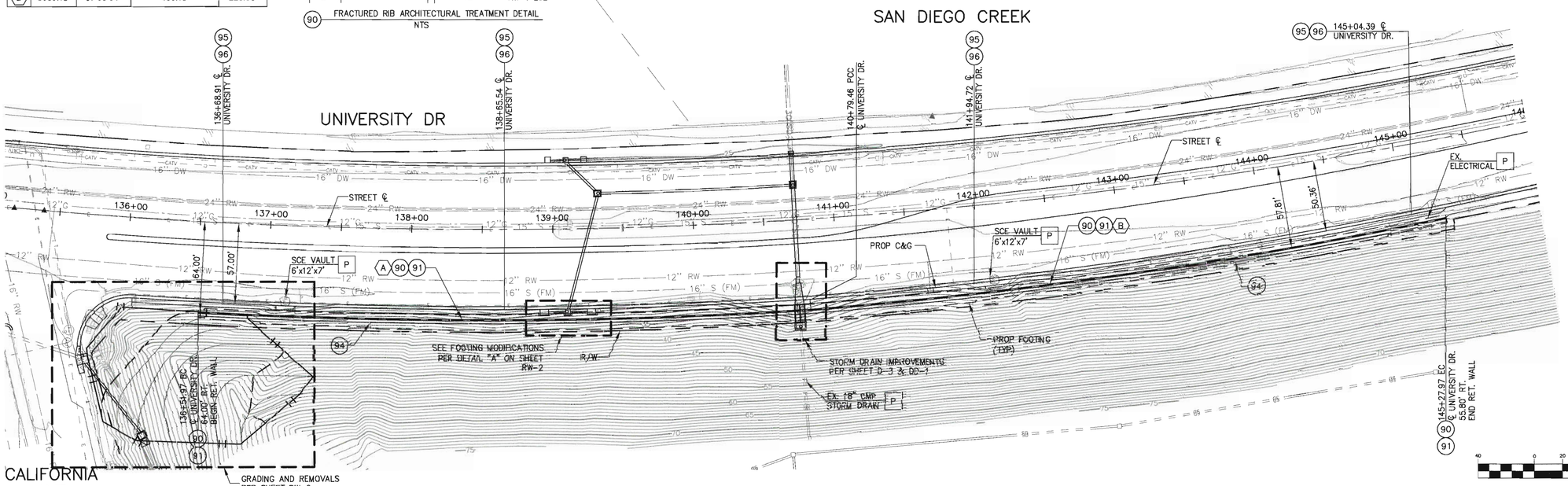


SCALE
HORIZ: 1"=40'
VERT: 1"=4'

CURVE DATA TABLE				
NO.	RADIUS	DELTA	LENGTH	TANGENT
A	3664.18'	06°48'04"	434.94'	217.73'
B	3659.18'	07°08'34"	456.18'	228.38'



90 FRACTURED RIB ARCHITECTURAL TREATMENT DETAIL
NTS



CONSTRUCTION NOTES

P PROTECT EXISTING IMPROVEMENT IN PLACE.

90 CONSTRUCT TYPE 1 (CASE 2) RETAINING WALL WITH FRACTURED RIB ARCHITECTURAL TREATMENT PER CALTRANS STANDARD PLAN B3-1B (DESIGN H PER PROFILE) AND TYPICAL SECTION ON SHEET X-1. FRACTURED RIB ARCHITECTURAL TREATMENT PER DETAIL 90 ON SHEET RW-1.

91 INSTALL CABLE RAILING FOR RETAINING WALL WITH GUTTER PER CALTRANS STANDARD PLAN B11-47 (SECTION C-C).

92 CONSTRUCT WALL EXPANSION JOINT PER CALTRANS STANDARD PLAN B0-3 (INTERVALS PER PROFILE).

93 CONSTRUCT WALL WEAKENED PLANE JOINT PER CALTRANS STANDARD PLAN B0-3 (INTERVALS PER PROFILE).

94 CONSTRUCT WALL GUTTER PER CALTRANS STANDARD PLAN B3-6.

95 CONSTRUCT "WALL DRAIN WITH PIPE DOME" (WITH 4" PVC PIPE) AND OVERFLOW SCUPPER ("WALL DRAIN DETAIL") PER CALTRANS STANDARD PLAN B3-6.

96 CONSTRUCT "RETAINING WALL GUTTER OUTLET" PER CALTRANS STANDARD PLAN B3-6.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

811 Know what's below Call before you dig

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

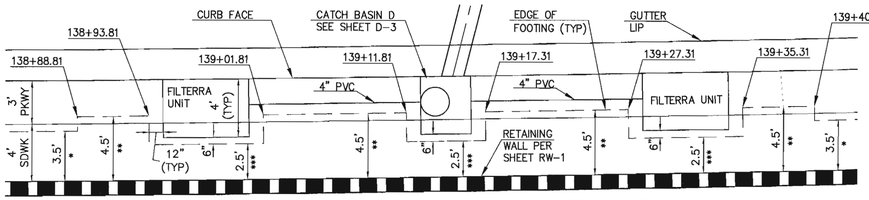
PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY:	GG/MG/CM	DATE JUL 2016
DESIGNED BY:	MG/CM	DATE JUL 2016
CHECKED BY:	RGB	DATE JUL 2016
RECOMMENDED BY:		DATE

RETAINING WALL PLAN/PROFILE
UNIVERSITY DRIVE WIDENING
FROM STA 136+00 TO STA 146+00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

RW-1
SHT 42 OF 87



DETAIL "A"

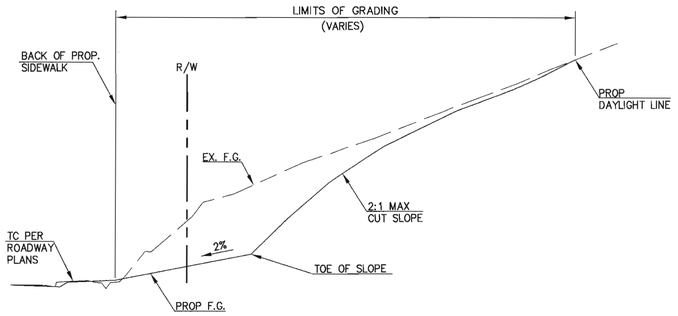
SCALE: 1"=5'

FOOTING NOTES

* 3.5' FOUNDATION PER STD PLAN.

** 4.5' FOUNDATION EQUIVALENT SECTION BETWEEN DRAINAGE INLETS.

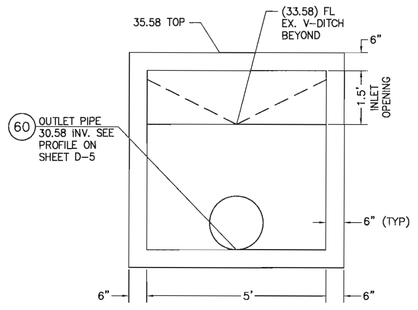
*** 2.5' FOUNDATION AT BACK OF DRAINAGE INLETS.



SECTION A-A

HORIZ. SCALE: 1"=20'

VERT. SCALE: 1"=10'



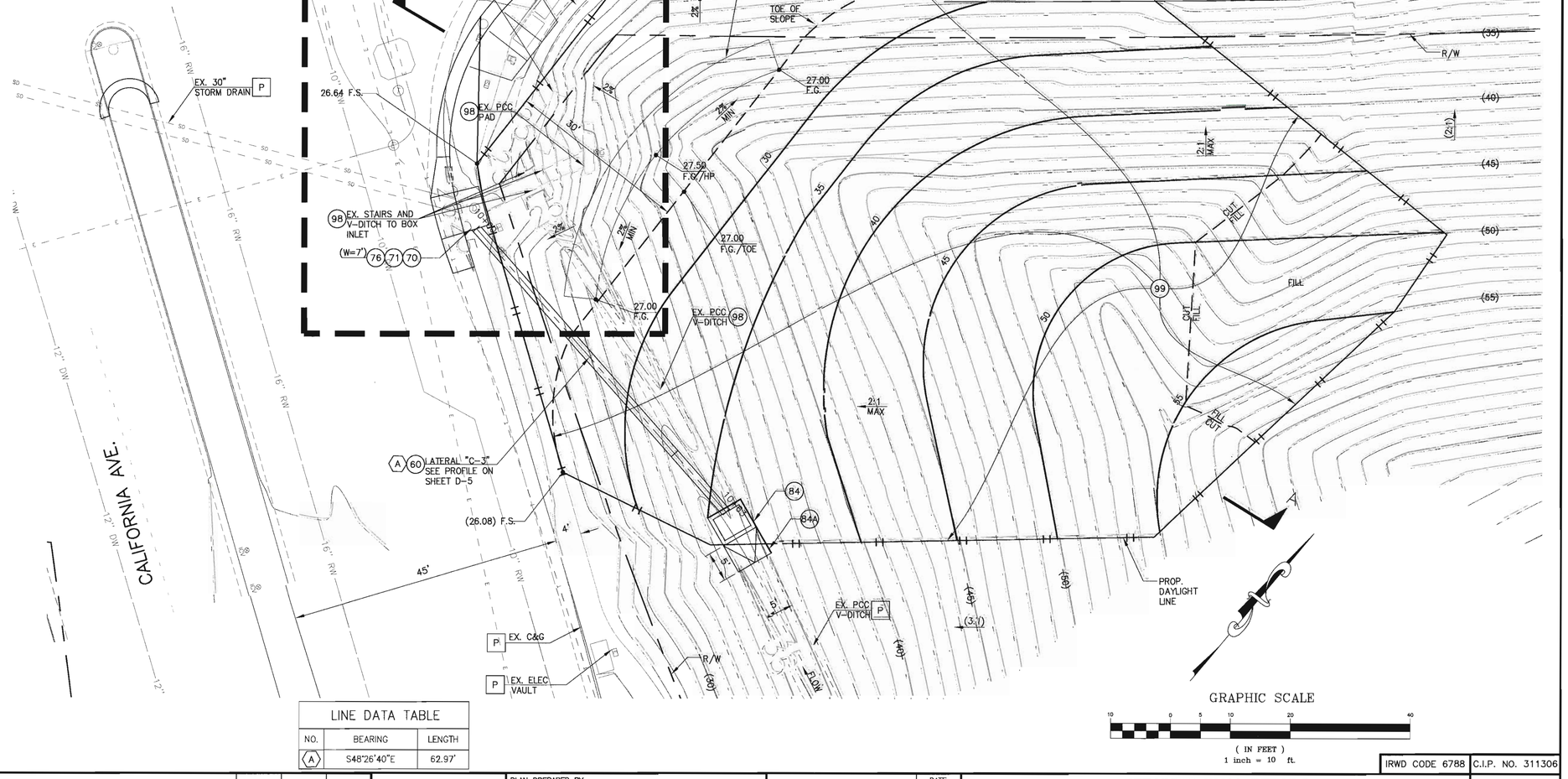
V-DITCH TO BOX INLET CONNECTION DETAIL

84

NOT TO SCALE

CONSTRUCTION NOTES

- P — PROTECT EXISTING IMPROVEMENT IN PLACE.
- 60 — CONSTRUCT 18"RCP, (2000-D) PER CITY OF IRVINE STANDARD PLAN 223 AND 318.
- 70 — CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STANDARD PLAN 303 (A=2').
- 71 — CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STANDARD PLAN 301 (W AND H PER PLAN).
- 76 — REMOVE EXISTING CATCH BASIN (W PER PLAN).
- 84 — CONSTRUCT MODIFIED CATCH BASIN TYPE I PER CITY OF IRVINE STANDARD PLAN 300 AND DETAIL 84 ON SHEET RW-2.
- 84A — CONSTRUCT V DITCH TO "U" GUTTER TRANSITION. MATCH EXISTING V DITCH UPSTREAM AND MATCH 5' X 1.5' INLET OPENING DOWNSTREAM. PLACE 12" LONG #4 "L" DOWELS AT 12" O.C. TO JOIN "U" GUTTER WITH INLET BOX.
- 98 — REMOVE EXISTING PCC IMPROVEMENT (IMPROVEMENT PER PLAN).
- 99 — GRADE EXISTING SLOPE (2:1 MAXIMUM) PER SECTION A-A ON SHEET RW-2. FILL AREAS TO BE BENCHED PER O.C.P.W STD. PLAN 1322.



GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1 inch = 10 ft.

LINE DATA TABLE		
NO.	BEARING	LENGTH
A	S48°26'40"E	62.97'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:

Harris & Associates℠

22 Executive Park, Suite 200 – Irvine, CA 92614

PHONE: (949) 655-3900 ● FAX: (949) 655-3995

Randall Berry 7/7/17

RANDALL G. BERRY RCE #44642 DATE

		DATE
DRAWN BY:	GG/MG/CM	JUL 2016
DESIGNED BY:	MG/CM	JUL 2016
CHECKED BY:	RGB	JUL 2016
RECOMMENDED BY:		DATE

RETAINING WALL DETAILS

UNIVERSITY DRIVE WIDENING

RETAINING WALL AND GRADING DETAILS

CITY OF IRVINE

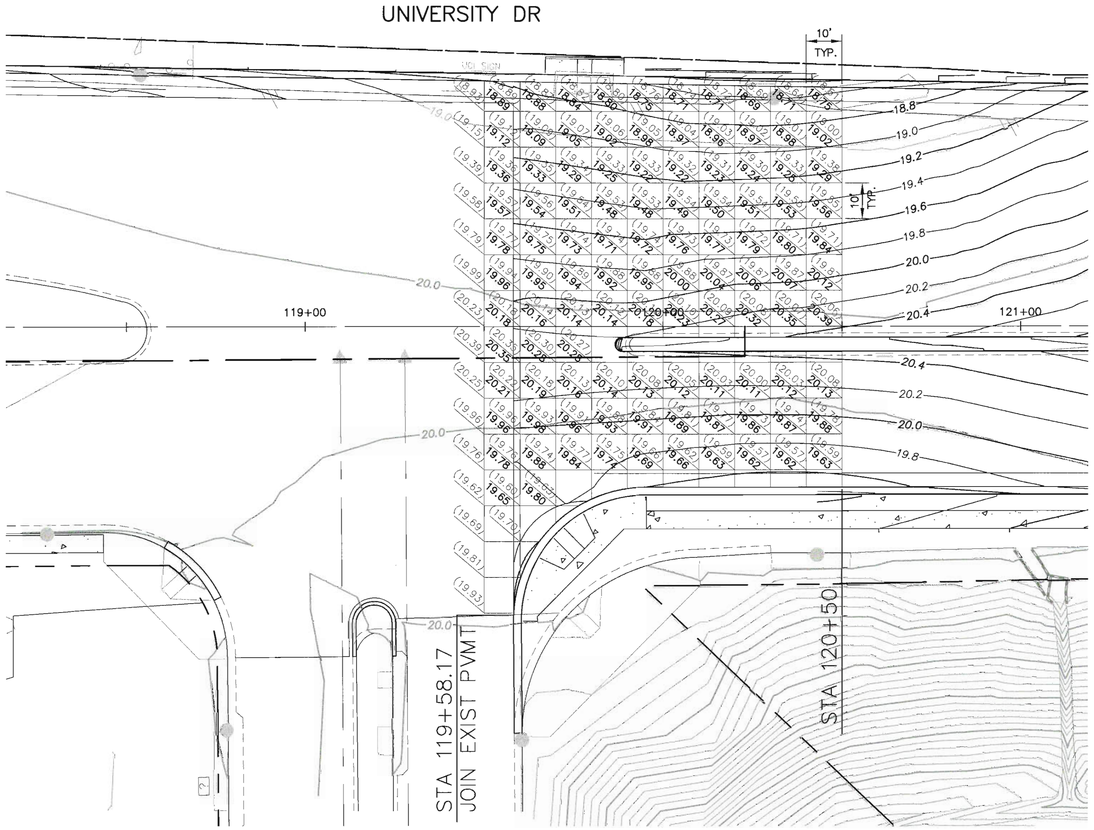
PUBLIC WORKS DEPARTMENT

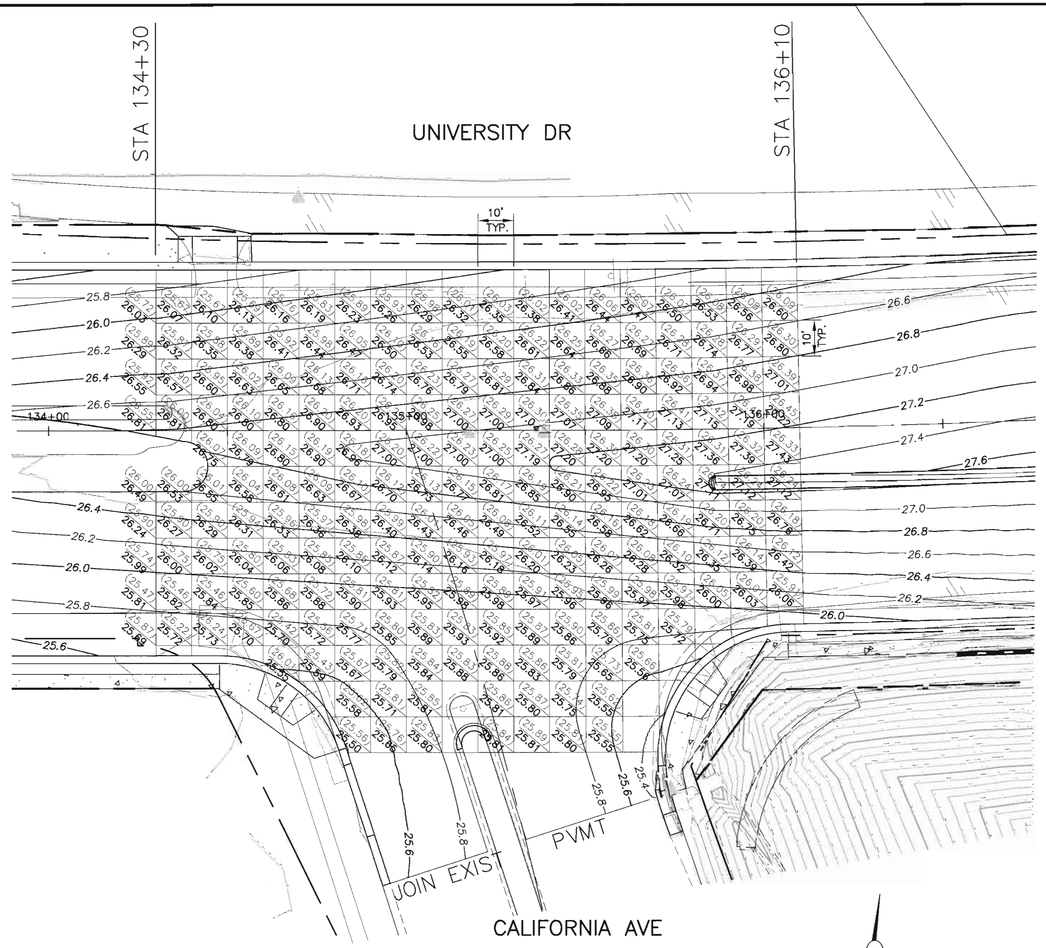
IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

RW-2

SHT 43 OF 87





811 Know what's below Call before you dig

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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5					
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REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

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Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

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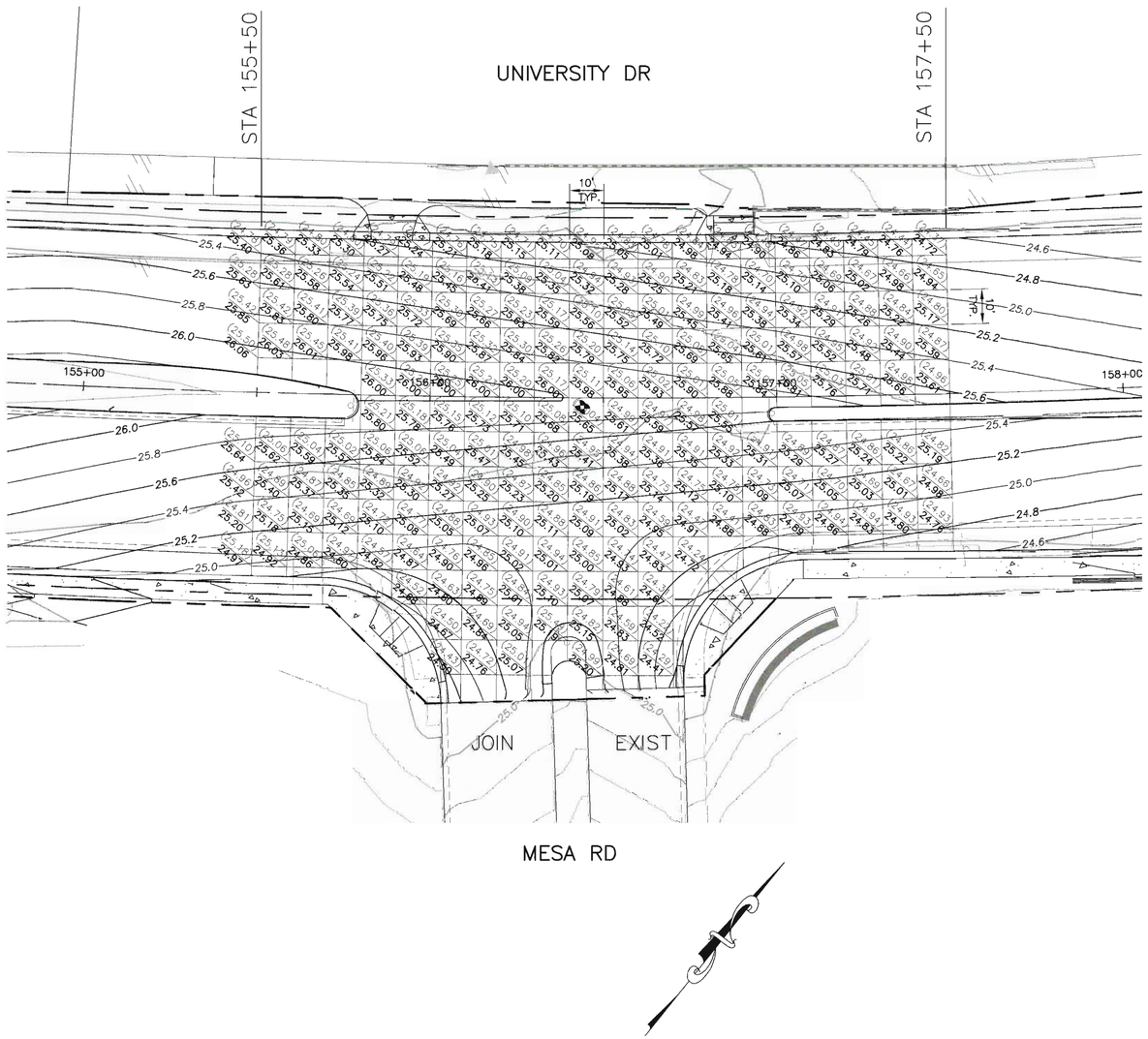
IRWD CODE 6788 | C.I.P. NO. 311306

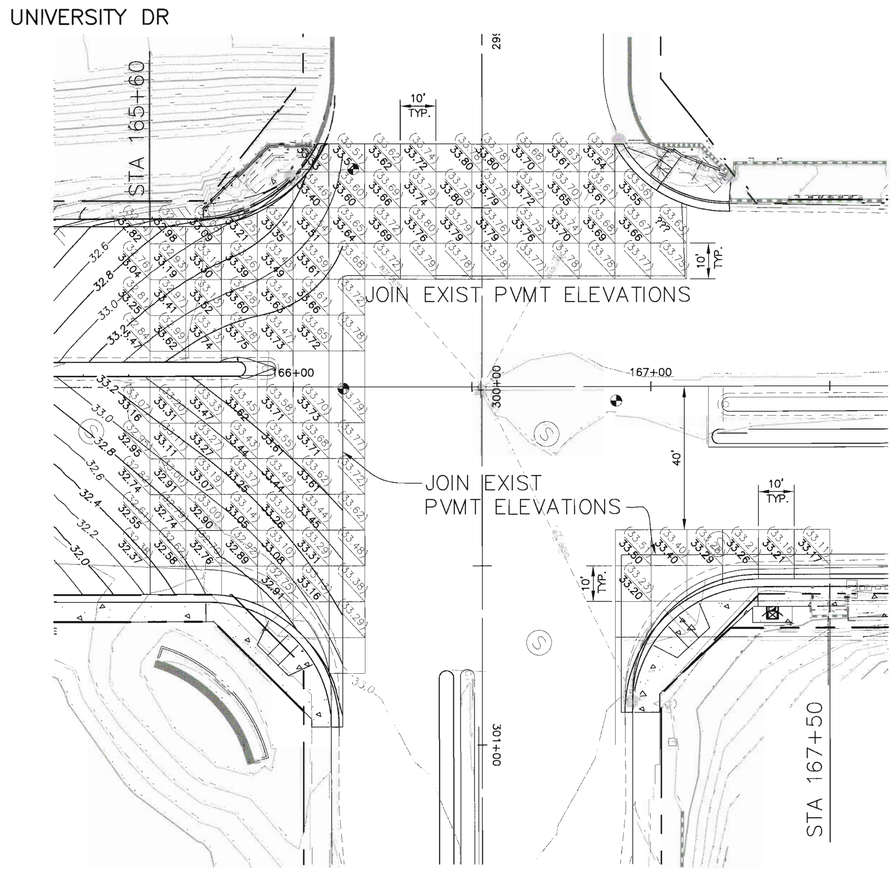
GRIDDED INTERSECTION
UNIVERSITY DRIVE WIDENING

PLAN CHECK NO. 00663284–EMC

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

GI–1
SHT 44 OF 87





GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below
Call before you dig

IRWD CODE 6788 | C.I.P. NO. 311306

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7					
6					
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REGISTERED PROFESSIONAL ENGINEER
RANDALL G. BERRY
NO. C44642
RENEW. 3/31/18
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

DRAWN BY: GG/MG/CM	DATE	JUL 2016
DESIGNED BY: MG/CM	DATE	JUL 2016
CHECKED BY: RGB	DATE	JUL 2016
RECOMMENDED BY:	DATE	

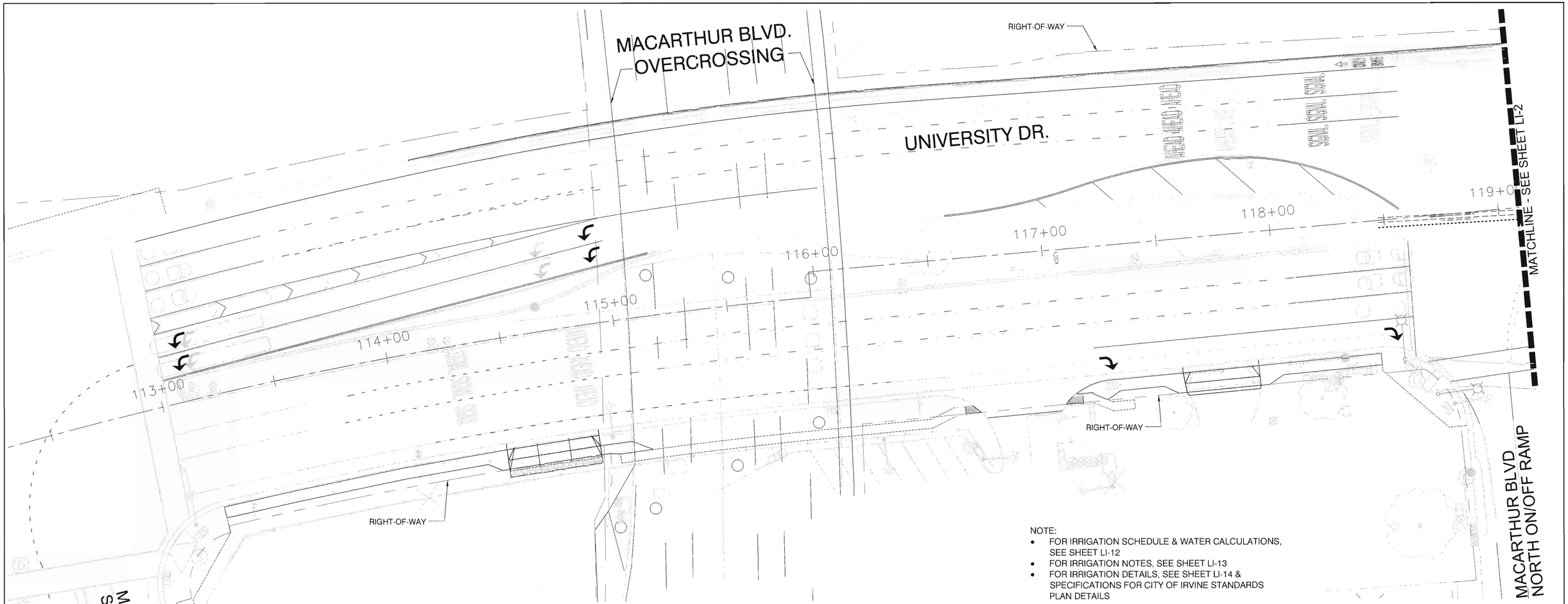
GRIDDED INTERSECTION
UNIVERSITY DRIVE WIDENING

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

GI-2

SHT 45 OF 87



NOTE:
- FOR IRRIGATION SCHEDULE & WATER CALCULATIONS, SEE SHEET LI-12
- FOR IRRIGATION NOTES, SEE SHEET LI-13
- FOR IRRIGATION DETAILS, SEE SHEET LI-14 & SPECIFICATIONS FOR CITY OF IRVINE STANDARDS PLAN DETAILS

EQUIPMENT LOCATION NOTE

1. INSTALL ALL IRRIGATION EQUIPMENT, PRESSURE MAIN LINE PIPING, CONTROL VALVES, ETC. WITHIN PLANTING AREA - ANY IRRIGATION EQUIPMENT SHOWN OUTSIDE OF PLANTING AREA IS FOR DRAWING CLARITY (TYPICAL).

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IRRIGATION SLEEVE SIZES

PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
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ONSITE APPROVAL: _____ DATE:_____

DIGALERT — DIAL BEFORE YOU DIG — TOLL FREE — TWO WORKING DAYS BEFORE YOU DIG — 1-800-227-2600 — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet

SCALE: 1" = 20'

NORTH

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY — No. 2214 — 7.10.17 — RENEWAL 8/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

DRAWN BY: CV	DATE	AUG 2016
DESIGNED BY: AG	DATE	AUG 2016
CHECKED BY: AG	DATE	AUG 2016
RECOMMENDED BY:	DATE	

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

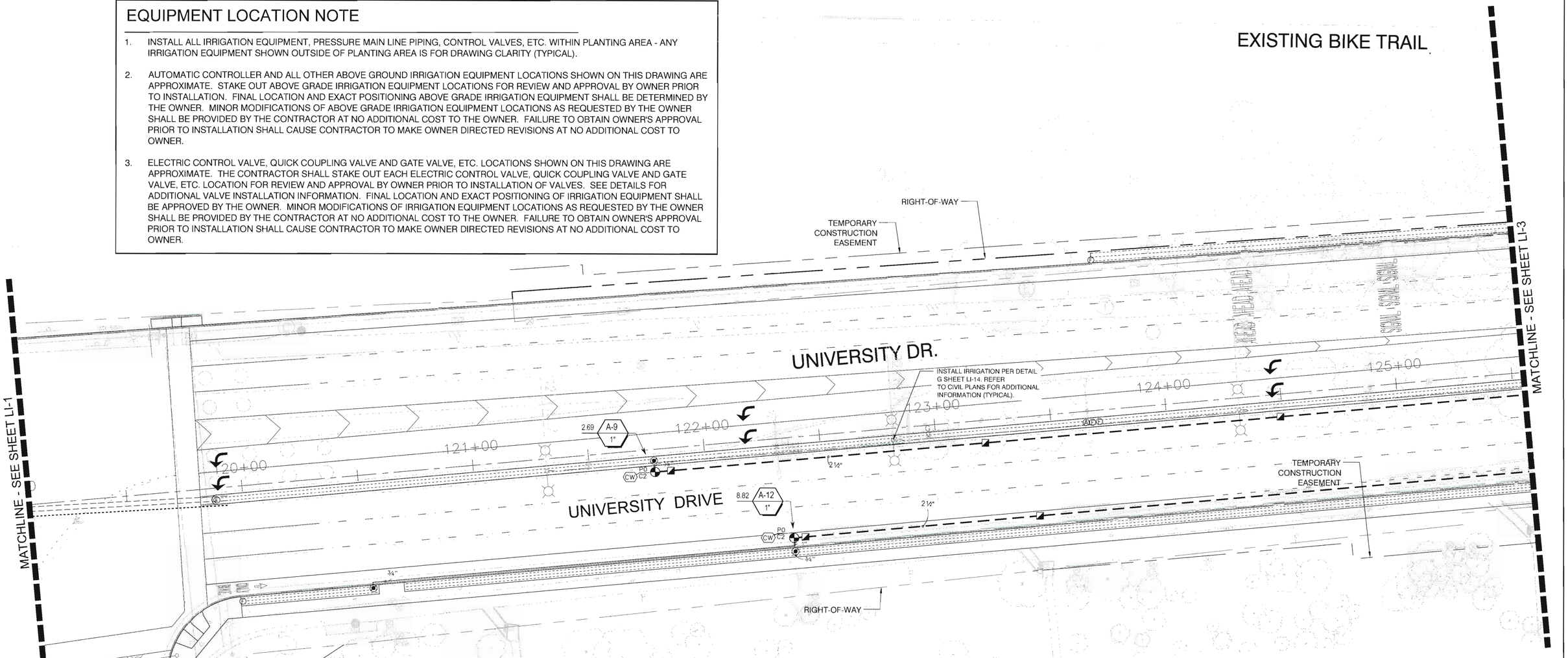
SHEET LI-1

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REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY 2214 Date 5/31/18 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
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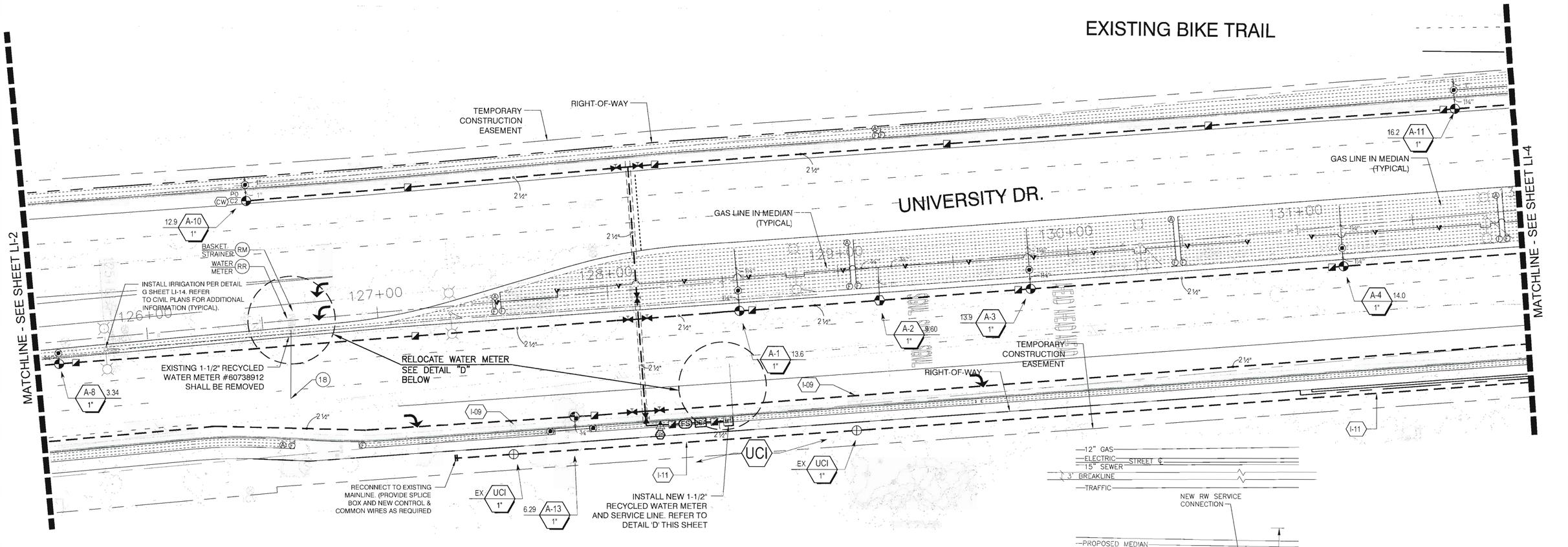
ARTHUR D. GUY RLA #2214 7.10.17 DATE

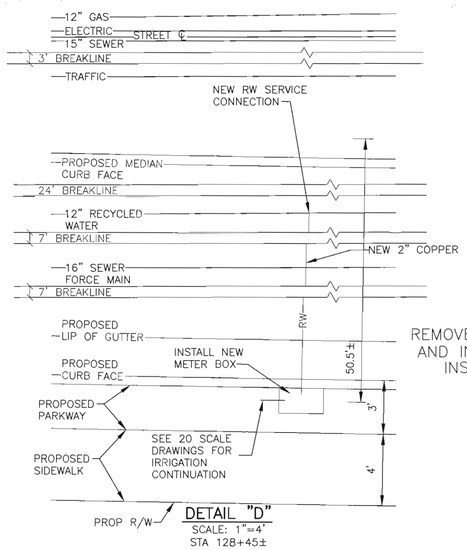
DRAWN BY: CV	DATE	AUG 2016
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UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-2
SHEET 47 OF 87





REMOVE RW WM & STRAINER AT STA 126+62± AND INSTALL PLUG ON EXISTING CONNECTION, INSTALL NEW RW WM AT STA 128+50±

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CONSTRUCTION NOTES

(RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT

(RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD

(18) INSTALL NEW 2" BRASS PLUG ON SADDLE

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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY — 2214 — 7.10.17 — Date 9/31/2016 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

DRAWN BY: CV	DATE	AUG 2016
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UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LI-3 SHEET 48 OF 87

EXISTING RAINBIRD MAXI-COM CONTROLLER #716 TO BE REPLACED W/ ET PRO 3 ASSEMBLY WEATHERTRAK WTPRO3S-C-18SWM - 18 STATION SMART WATER MANAGER AUTOMATIC CONTROLLER ASSEMBLY "A" MOUNTED WITHIN A HYDROSCAPE HS9-WTPRO2SC30S/HSCOM1248-2Y A COMBINATION STAINLESS STEELMETER PEDESTAL AND COMPANION CONTROLLER ENCLOSURE ASSEMBLY.CONTROLLER "A" SHALL BE MOUNTED WITHIN THE COMPANION SIDE OF THE STAINLESS STEEL VANDAL RESISTANT METER PEDESTAL / COMPANION ENCLOSURE. ENCLOSURE ASSEMBLY SHALL INCLUDE THE SPECIFIED CONTROLLER, REMOTE INTERFACE FOR RADIO REMOTE ACTIVATION OF CONTROLLER AND "WEATHERTRAK" FLEX PANCAKE ANTENNA FOR CONTROLLER. THE 120 VOLT POWER SUPPLY FOR HOOK-UP OF THE AUTOMATIC CONTROLLER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. REFER TO SITE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION. ALL ELECTRICAL WORK SHALL COMPLY WITH ALL APPLICABLE ELECTRICAL CODES. FINAL LOCATION OF AUTOMATIC CONTROLLER SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. REFER TO IRRIGATION SPECIFICATIONS AND AUTOMATIC CONTROLLER ENCLOSURE DETAIL FOR ADDITIONAL INFORMATION.

NEW 120 VAC POWER IN 2" SCHEDULE 40 CONDUIT FROM RELOCATED POWER METER TO NEW UPGRADED CONTROLLER LOCATIONS. INSTALL 24" DEPTH & 12" FROM EDGE OF BIKE TRAIL. INSTALL PER LOCAL ELECTRICAL CODES & ORDINANCES.

EXISTING RAINBIRD MAXI-COM CONTROLLER #716 TO BE REPLACED W/ ET PRO 3 ASSEMBLY WEATHERTRAK WTPRO3S-C-36SWM - 36 STATION SMART WATER MANAGER AUTOMATIC CONTROLLER ASSEMBLY "B" MOUNTED WITHIN A HYDROSCAPE HS9-WTPRO2SC30S/HSCOM1248-2Y A COMBINATION STAINLESS STEELMETER PEDESTAL AND COMPANION CONTROLLER ENCLOSURE ASSEMBLY.CONTROLLER "B" SHALL BE MOUNTED WITHIN THE COMPANION SIDE OF THE STAINLESS STEEL VANDAL RESISTANT METER PEDESTAL / COMPANION ENCLOSURE. ENCLOSURE ASSEMBLY SHALL INCLUDE THE SPECIFIED CONTROLLER, REMOTE INTERFACE FOR RADIO REMOTE ACTIVATION OF CONTROLLER AND "WEATHERTRAK" FLEX PANCAKE ANTENNA FOR CONTROLLER. THE 120 VOLT POWER SUPPLY FOR HOOK-UP OF THE AUTOMATIC CONTROLLER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. REFER TO SITE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION. ALL ELECTRICAL WORK SHALL COMPLY WITH ALL APPLICABLE ELECTRICAL CODES. FINAL LOCATION OF AUTOMATIC CONTROLLER SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. REFER TO IRRIGATION SPECIFICATIONS AND AUTOMATIC CONTROLLER ENCLOSURE DETAIL FOR ADDITIONAL INFORMATION.

EXISTING EDISON POWER METER #308-371482 (RELOCATED)

RIGHT-OF-WAY

EXISTING BIKE TRAIL

UNIVERSITY DRIVE

MATCHLINE - SEE SHEET LI-3

MATCHLINE - SEE SHEET LI-5

INSTALL IRRIGATION PER DETAIL G SHEET LI-14. REFER TO CIVIL PLANS FOR ADDITIONAL INFORMATION (TYPICAL).

TEMPORARY CONSTRUCTION EASEMENT

RIGHT-OF-WAY

TEMPORARY CONSTRUCTION EASEMENT

EXISTING SIGN TO BE REMOVED

PROPOSED SIGN TO BE BUILT BY UCI.

UCI CAMPUS IRRIGATION SYSTEM TO BE RETROFITTED W/ OFF SITE GRADING OF SLOPE.

CALIFORNIA AVENUE

RECONNECT TO EXISTING MAINLINE. (PROVIDE SPLICE BOX AND NEW CONTROL & COMMON WIRES AS REQUIRED

EXISTING MAINLINE PROTECT OR REPLACE

CONNECTION POINTS

EXISTING 2" PIPE

EXISTING ON-GRADE PIPE. VERIFY VALVE LOCATIONS AND INTEGRITY OF PIPE. REPLACE DAMAGED PIPE AS NECESSARY

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APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

DIGALERT — DIAL BEFORE YOU DIG TOLL FREE 1-800-227-2600 — TWO WORKING DAYS BEFORE YOU DIG — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet

SCALE: 1" = 20'

NORTH

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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2					
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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY 2214 — SIGN IN 7.10.17 — EXP. 8/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LI-4

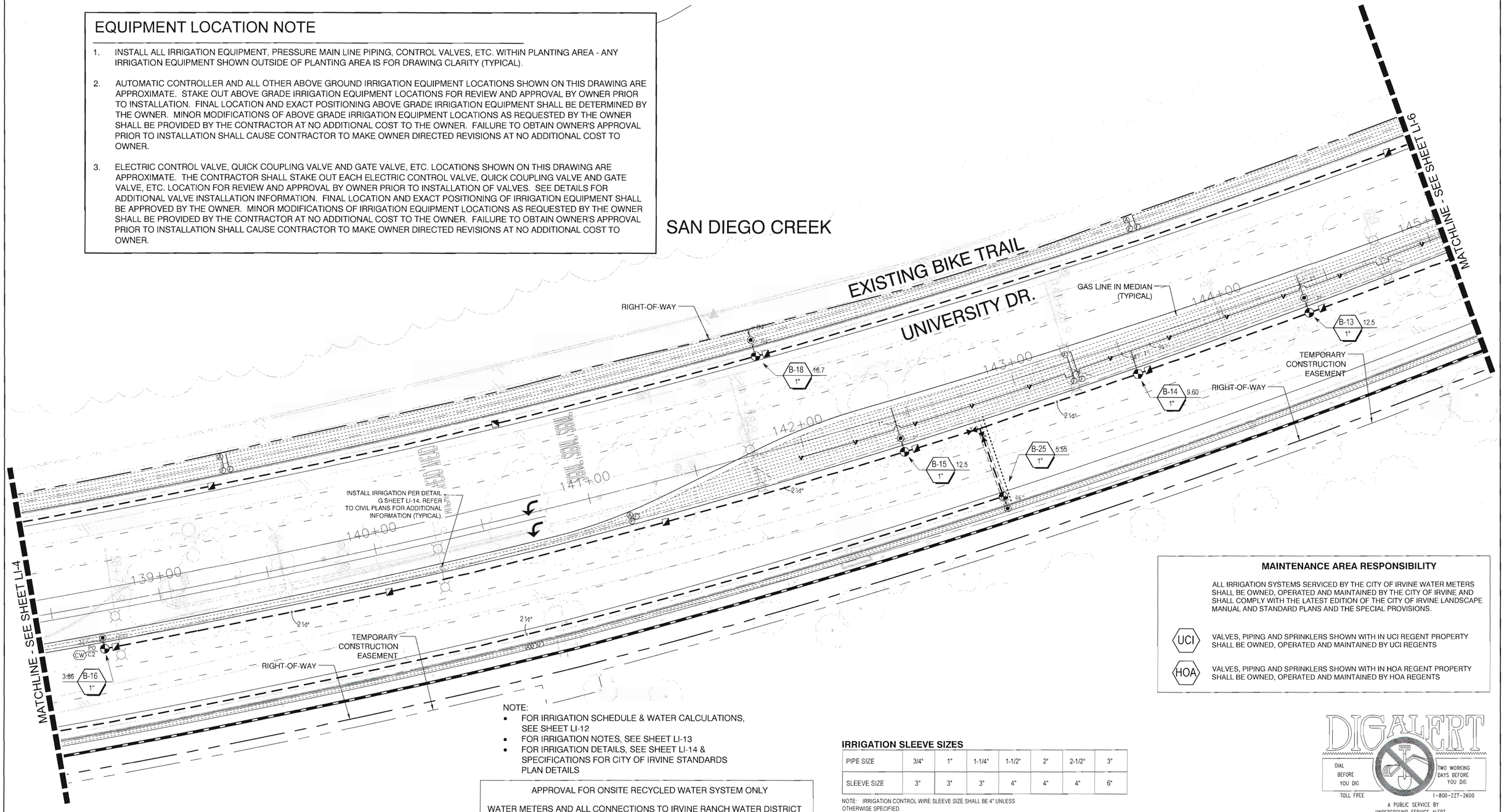
SHEET 49 OF 87

EQUIPMENT LOCATION NOTE

1. INSTALL ALL IRRIGATION EQUIPMENT, PRESSURE MAIN LINE PIPING, CONTROL VALVES, ETC. WITHIN PLANTING AREA - ANY IRRIGATION EQUIPMENT SHOWN OUTSIDE OF PLANTING AREA IS FOR DRAWING CLARITY (TYPICAL).

2. AUTOMATIC CONTROLLER AND ALL OTHER ABOVE GROUND IRRIGATION EQUIPMENT LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. STAKE OUT ABOVE GRADE IRRIGATION EQUIPMENT LOCATIONS FOR REVIEW AND APPROVAL BY OWNER PRIOR TO INSTALLATION. FINAL LOCATION AND EXACT POSITIONING ABOVE GRADE IRRIGATION EQUIPMENT SHALL BE DETERMINED BY THE OWNER. MINOR MODIFICATIONS OF ABOVE GRADE IRRIGATION EQUIPMENT LOCATIONS AS REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO INSTALLATION SHALL CAUSE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO OWNER.

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PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

MAINTENANCE AREA RESPONSIBILITY

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UCI — VALVES, PIPING AND SPRINKLERS SHOWN WITH IN UCI REGENT PROPERTY SHALL BE OWNED, OPERATED AND MAINTAINED BY UCI REGENTS

HOA — VALVES, PIPING AND SPRINKLERS SHOWN WITH IN HOA REGENT PROPERTY SHALL BE OWNED, OPERATED AND MAINTAINED BY HOA REGENTS

IRRIGATION SLEEVE SIZES

PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
SLEEVE SIZE	3"	3"	3"	4"	4"	4"	6"

NOTE: IRRIGATION CONTROL WIRE SLEEVE SIZE SHALL BE 4" UNLESS OTHERWISE SPECIFIED.

SLEEVES ARE REQUIRED FOR ALL IRRIGATION PIPING INSTALLED UNDER PAVING AREAS. REFER TO IRRIGATION SLEEVE SIZING CHART SHOWN ON THIS SHEET FOR IRRIGATION SLEEVE SIZE. (TYPICAL) NOTE: FOR DRAWING CLARITY ALL IRRIGATION SLEEVES ARE NOT SIZED, BUT SHALL BE INSTALLED AND INCLUDED AS A PART OF THE CONTRACTOR'S BID. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE ITSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, FOOTINGS, ETC AND COORDINATE ITS WORK WITH OTHER TRADES FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER FOOTINGS, UNDER ROADWAYS, UNDER PAVING, STRUCTURES, ETC.

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NORTH

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY — 2214 — 7.10.17 — Exp. 3/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
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3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

DRAWN BY: CV	DATE	AUG 2016
DESIGNED BY: AG	DATE	AUG 2016
CHECKED BY: AG	DATE	AUG 2016
RECOMMENDED BY:	DATE	

IRWD CODE 6788 | C.I.P. NO. 311306

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-5
SHEET 50 OF 87

DETAIL "O"
SCALE: 1"=4'
STA 150+11 ±

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CONSTRUCTION NOTES

(RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT

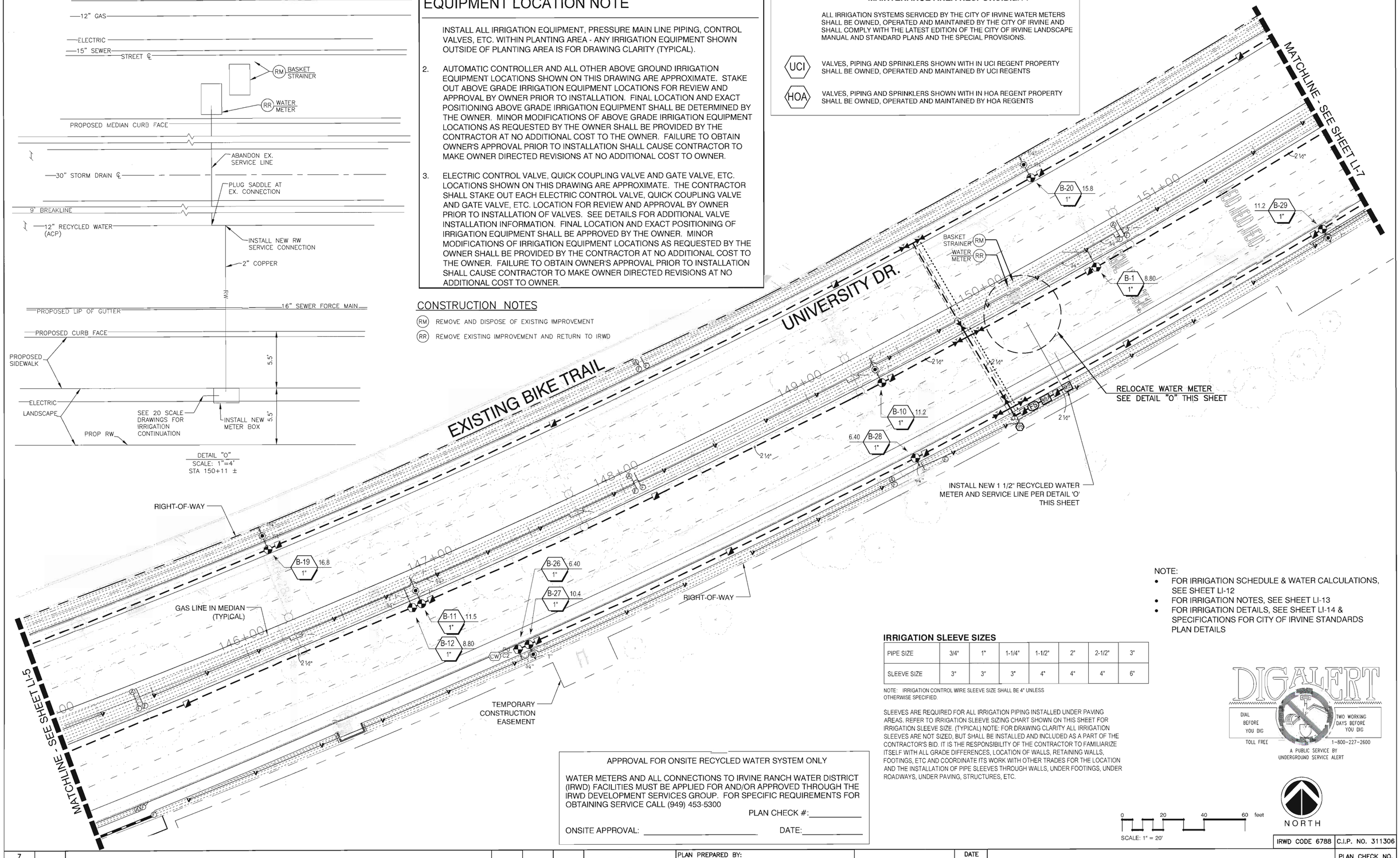
(RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD

MAINTENANCE AREA RESPONSIBILITY

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PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY — 2214 — 7.12.17 — RENEWAL 8/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2888 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.12.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-6
SHEET 51 OF 87

EQUIPMENT LOCATION NOTE

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REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION
	I-01 MODIFY EXISTING UCI REGENTS SPRAY AND/OR ROTOR SYSTEM
	I-02 EXISTING SUBSURFACE DRIPLINE (PROTECT-IN-PLACE). CAP ALL ENDS AT CUT PONTS TO PREVENT SOIL FROM ENTERING LINES.
	I-03 CUT EXISTING DRIPLINE AT APPROXIMATE POINTS. PROVIDE TECHLINE INSERT COUPLING (#T12COUP) AT EACH DRIPLINE EXTENSION POINTS.
	I-04 NEW LANDSCAPE DRIPLINE. INSTALL PER DETAIL A, SHEET LI-14 .
	I-05 EXISTING TREE BUBBLER SYSTEM PROTECT IN PLACE.
	I-06 CONCRETE NOSING. REFER TO CIVIL PLANS
	I-07 REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.
	I-08 MODIFY EXISTING IRRIGATION TO PROVIDE 100% COVERAGE
	I-09 RELOCATE EXISTING REMOTE CONTROL VALVE, GATE VALVE, AND/OR QUICK COUPLING VALVE
	I-10 REMOVE EXISTING ROTOR SPRINKLERS AND LATERAL LINES. RE-ESTABLISH NEW IRRIGATION SYSTEMS AS SHOWN PRIOR TO DEMOLITION OF EXISTING.
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	I-14 REFER TO CIVIL PLANS FOR UTILITY RELOCATION
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	I-16 REFER TO DETAIL `W` THIS SHEET FOR DISPOSITION OF EXISTING WATER METERS
	I-17 RELOCATE OR UPGRADE EXISTING IRRIGATION CONTROLLERS AS SHOWN ON PLAN

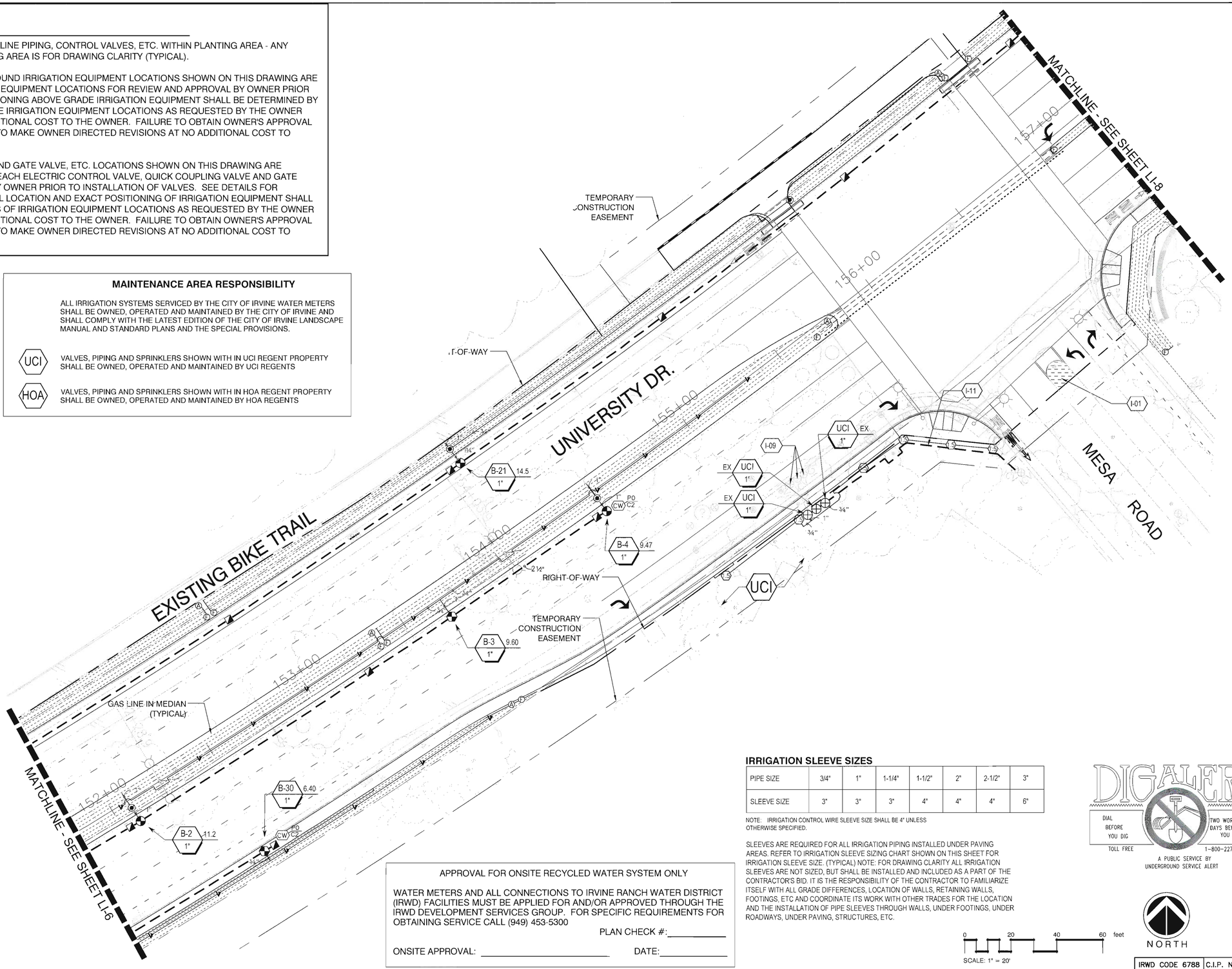
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PLAN CHECK #:_____

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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY III — 2214 — 7-10-17 — EXP 9/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

7-10-17
ARTHUR D. GUY LRLA #2214 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

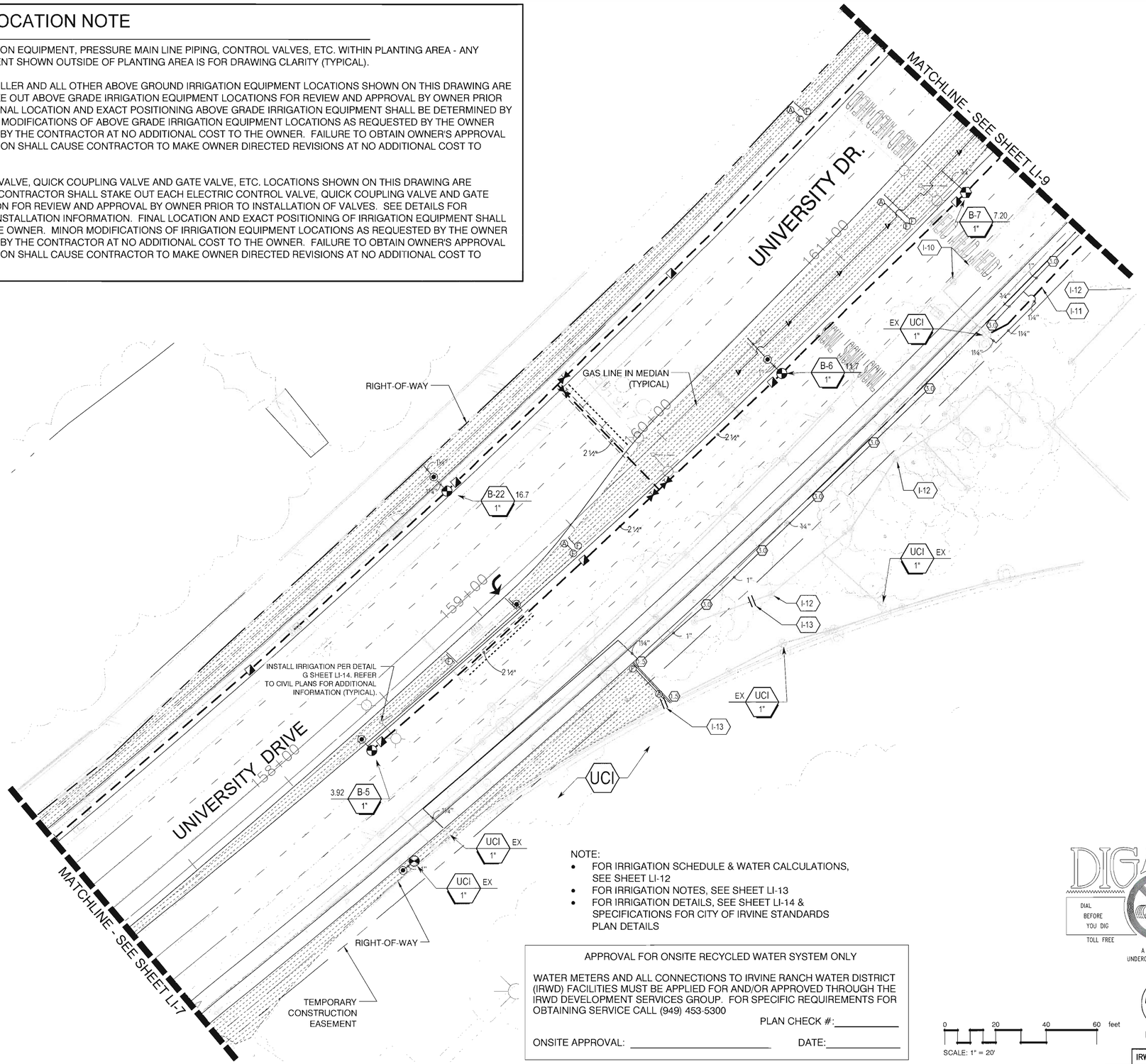
SHEET LI-7
SHEET 52 OF 87

REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION
I-01	MODIFY EXISTING UCI REGENTS SPRAY AND/OR ROTOR SYSTEM
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NOTE:
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- FOR IRRIGATION NOTES, SEE SHEET LI-13
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PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

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TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY — 2214 — 7.10.17 — Date — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-8 SHEET 53 OF 87

MAINTENANCE AREA RESPONSIBILITY

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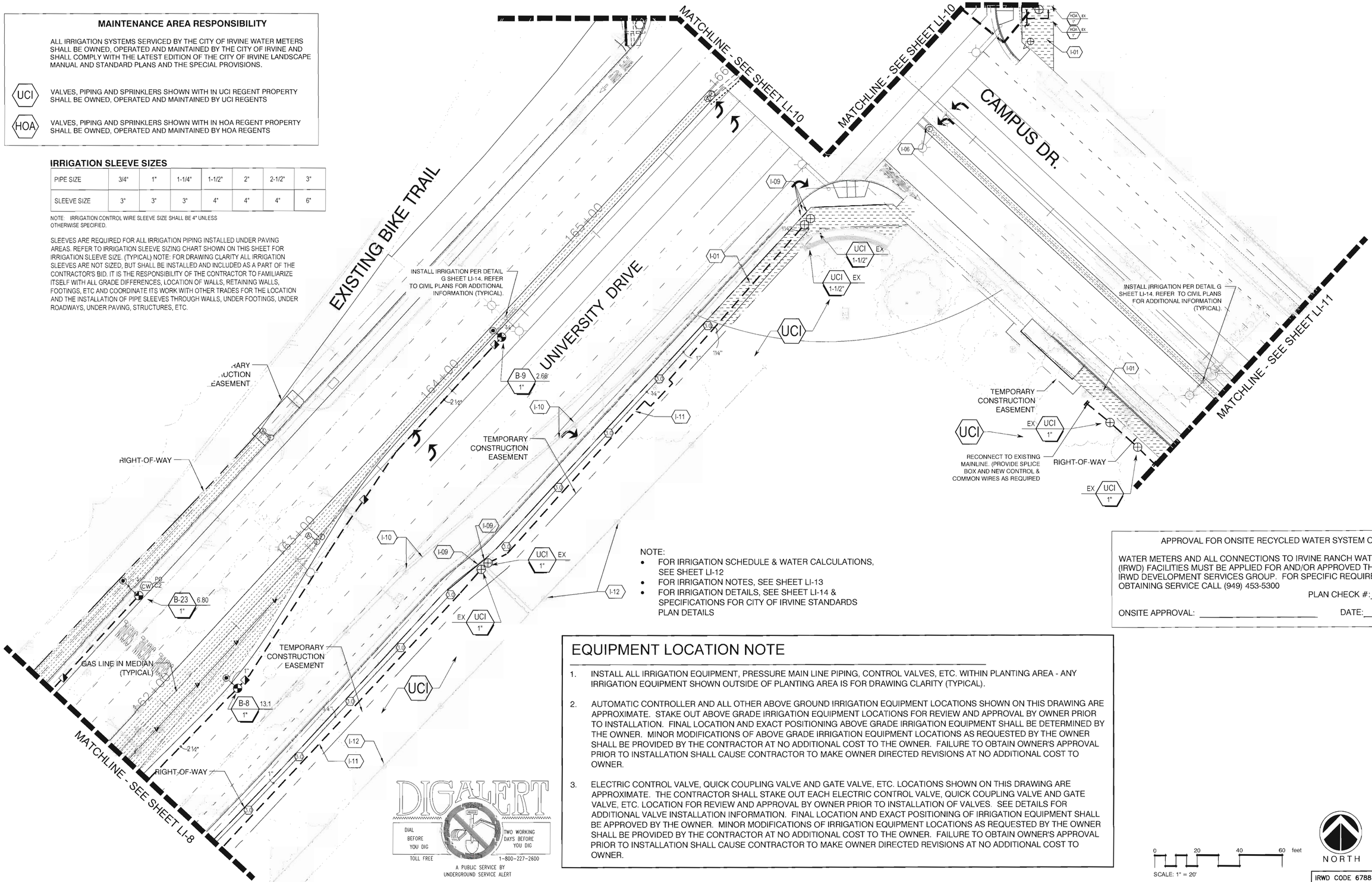
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0 20 40 60 feet
SCALE: 1" = 20'

NORTH

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY No. 2214 — Exp. 5/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 — DATE

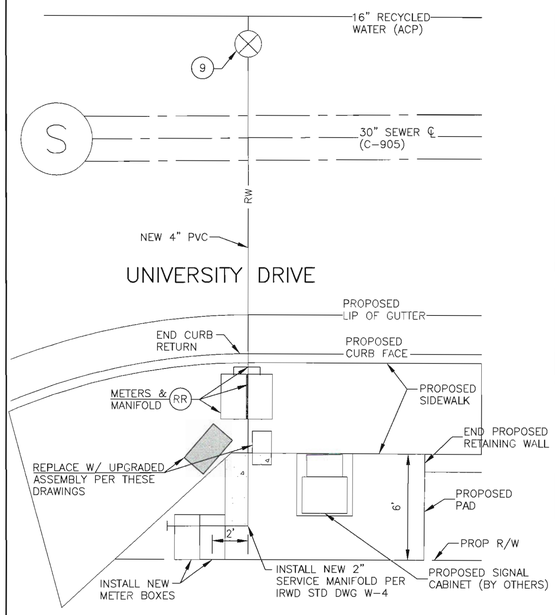
		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

IRWD CODE 6788 | C.I.P. NO. 311306

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

SHEET LI–9
SHEET 54 OF 87



DETAIL "W"
SCALE: 1"=4'
STA 167+30 ±

CONSTRUCTION NOTES

(RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD

(9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22

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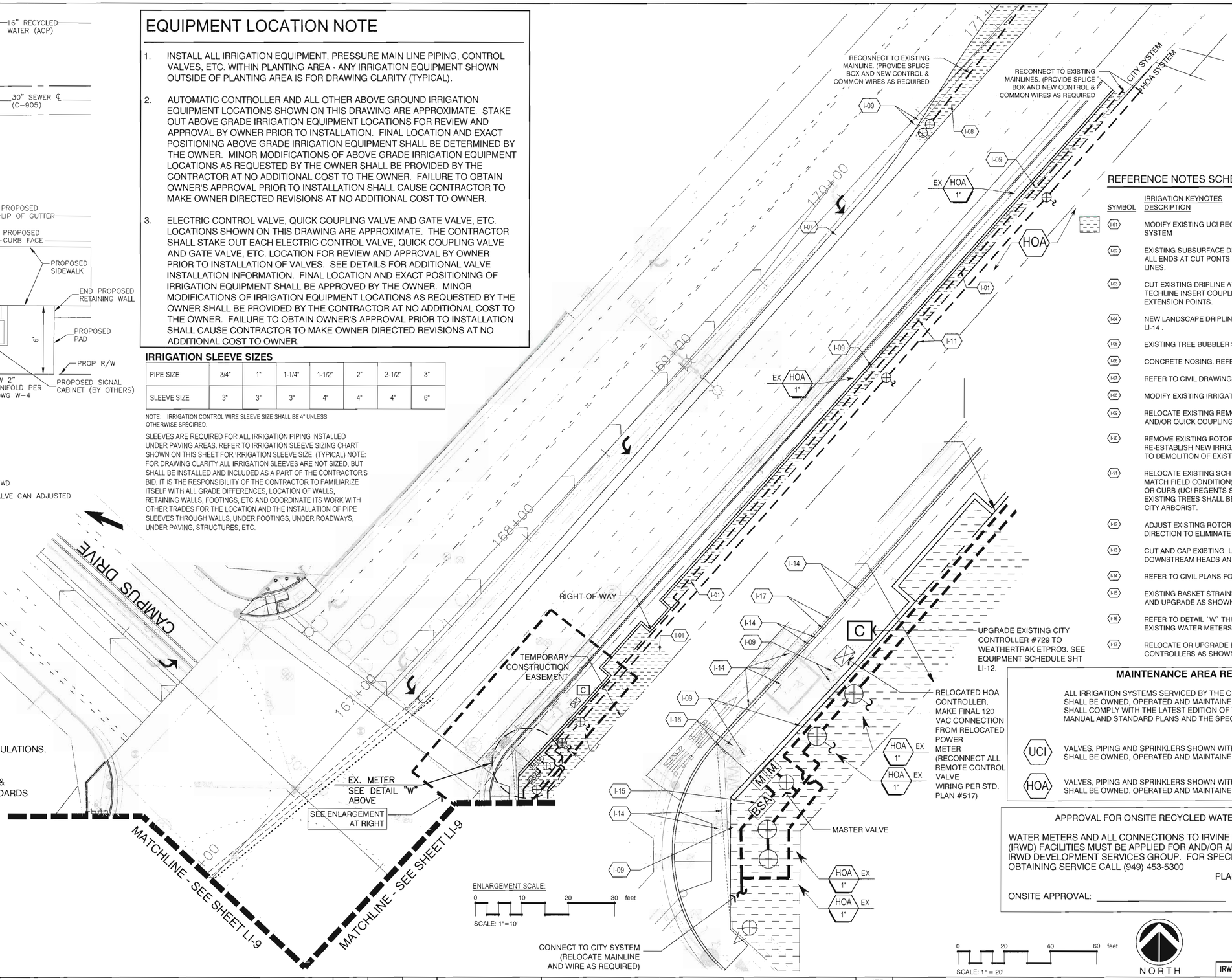
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I-11	RELOCATE EXISTING SCH 40 PVC MAINLINE 2" OR 2 1/2" TO MATCH FIELD CONDITION) 2 '-0" FROM EDGE OF SIDEWALK OR CURB (UCI REGENTS SYSTEM). EXCAVATING NEAR EXISTING TREES SHALL BE DONE UNDER SUPERVISION OF CITY ARBORIST.
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7					
6					
5					
4					
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1					

REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY 2214 Signature 7.10.17 Date 5/31/18 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

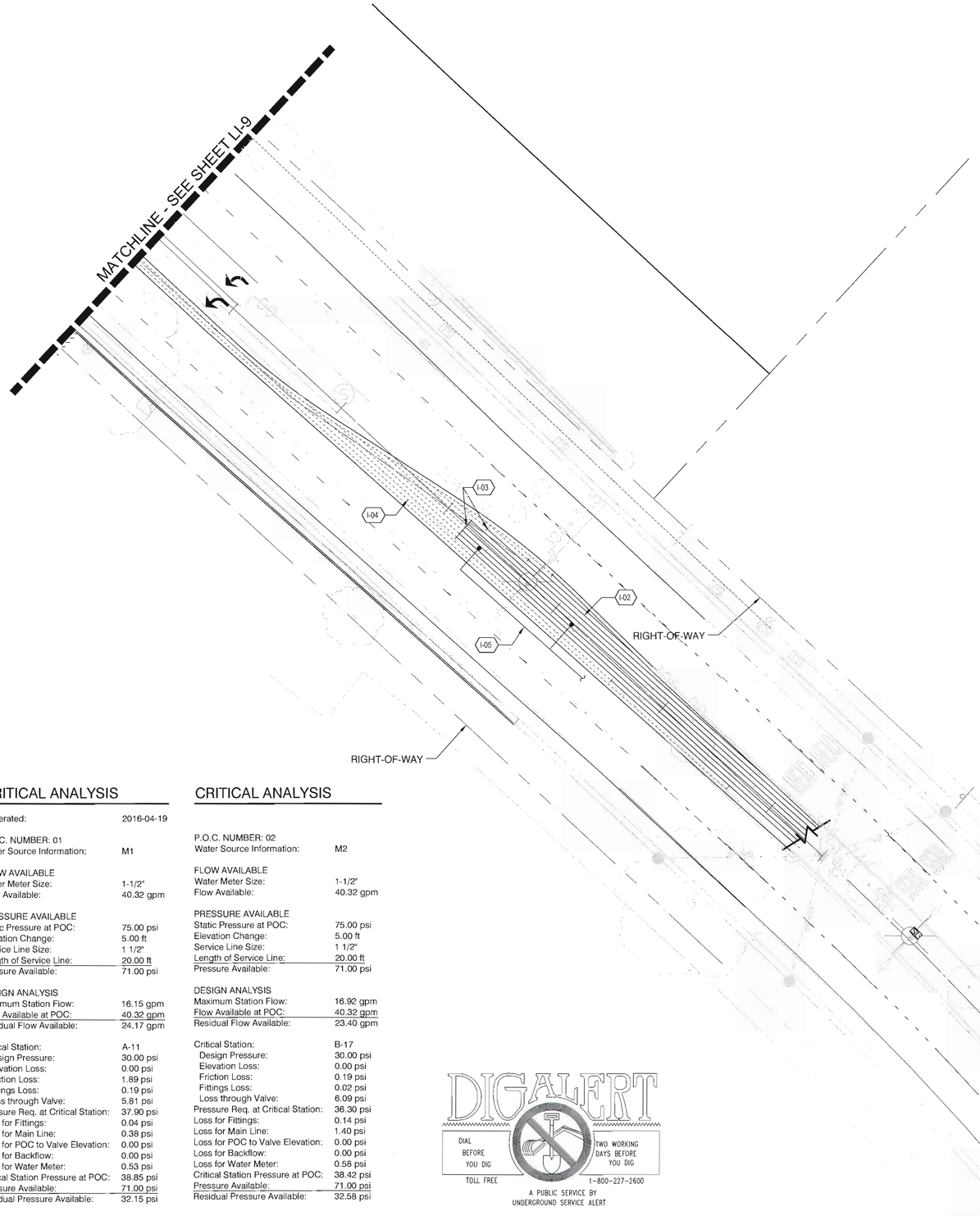
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UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-10
SHEET 55 OF 87



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PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

NOTE:
REFER TO C.I.P. NO. 351202 LANDSCAPE IRRIGATION PLAN FOR: CAMPUS DRIVE STREETSCAPE REHABILITATION (CULVER DR. TO UNIVERSITY DR.) FOR ADDITIONAL INFORMATION OF EXISTING CONDITIONS

NOTE:
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0 20 40 60 feet
SCALE: 1" = 20'

NORTH

IRWD CODE 6788 | C.I.P. NO. 311306

CRITICAL ANALYSIS

Generated:	2016-04-19
P.O.C. NUMBER: 01	
Water Source Information:	M1
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available:	40.32 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	75.00 psi
Elevation Change:	5.00 ft
Service Line Size:	1 1/2"
Length of Service Line:	20.00 ft
Pressure Available:	71.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	16.15 gpm
Flow Available at POC:	40.32 gpm
Residual Flow Available:	24.17 gpm
Critical Station:	A-11
Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi
Friction Loss:	1.89 psi
Fittings Loss:	0.19 psi
Loss through Valve:	5.81 psi
Pressure Req. at Critical Station:	37.90 psi
Loss for Fittings:	0.04 psi
Loss for Main Line:	0.38 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Loss for Water Meter:	0.53 psi
Critical Station Pressure at POC:	38.85 psi
Pressure Available:	71.00 psi
Residual Pressure Available:	32.15 psi

CRITICAL ANALYSIS

P.O.C. NUMBER: 02	
Water Source Information:	M2
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available:	40.32 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	75.00 psi
Elevation Change:	5.00 ft
Service Line Size:	1 1/2"
Length of Service Line:	20.00 ft
Pressure Available:	71.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	16.92 gpm
Flow Available at POC:	40.32 gpm
Residual Flow Available:	23.40 gpm
Critical Station:	B-17
Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi
Friction Loss:	0.19 psi
Fittings Loss:	0.02 psi
Loss through Valve:	6.09 psi
Pressure Req. at Critical Station:	36.30 psi
Loss for Fittings:	0.14 psi
Loss for Main Line:	1.40 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Loss for Water Meter:	0.58 psi
Critical Station Pressure at POC:	38.42 psi
Pressure Available:	71.00 psi
Residual Pressure Available:	32.58 psi

DIGALERT — DIAL BEFORE YOU DIG TOLL FREE 1-800-227-2600 — TWO WORKING DAYS BEFORE YOU DIG
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY — No. 2214 — Date 2/31/2016 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P. 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-11
SHEET 56 OF 87

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
	RAIN BIRD 1804-SAM-PRS-NP (2) 4.0" POP-UP SPRINKLER WITH (2) RB SQ-H NOZZLE PER TREE.	102	30	H/LI-14

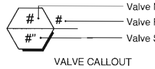
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
4.0	HUNTER PGP-04-CV-R TURF ROTOR, 4.0" POP-UP. ADJUSTABLE TO FULL CIRCLE. WITH DRAIN CHECK VALVE, AND RECLAIMED WATER PURPLE ID.	8	35	STD.-520
4.0	HUNTER PGP-04-CV-R TURF ROTOR, 4.0" POP-UP. ADJUSTABLE TO FULL CIRCLE. WITH DRAIN CHECK VALVE, AND RECLAIMED WATER PURPLE !D.	17	35	STD.-520
5.0	HUNTER PGP-00-CV-R SHRUB ROTOR, FIXED RISER. ADJUSTABLE TO FULL CIRCLE. WITH DRAIN CHECK VALVE.	14	25	STD.-520

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.	41	A/LI-14
F	NETAFIM TLFV-1 AUTOMATIC FLUSH VALVE, WITH INSERT INLET	72	B/LI-14
A	NETAFIM TLAVRV AIR/VACUUM RELIEF VALVE, 1/2" MALE PIPE THREAD.	36	C/LI-14
	AREA TO RECEIVE DRIPLINE NETAFIM TLRW-06-18 (18) TECHLINE RW LANDSCAPE DRIPLINE WITH PURPLE STRIPE FOR NON-POTABLE WATER APPLICATIONS. 0.6GPH EMITTERS AT 18.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. DESIGNED FOR RECLAIMED WATER USE ONLY.	82,413 S.F.	A/LI-14

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	RAIN BIRD XCZ-100-PRB-R PURPLE CAP DESIGNATES FOR RECLAIMED WATER, NON-POTABLE USE. 1" PESBR VALVE AND 1" PRESSURE REGULATING 40PSI BASKET FILTER. 5-20GPM.	34	D/LI-14
	RAIN BIRD PESBR 1", 1-1/2", AND 2" DURABLE CHLORINE-RESISTANT VALVES FOR RECLAIMED WATER APPLICATIONS. WITH SCRUBBER MECHANISM TECHNOLOGY, AND PURPLE FLOW CONTROL HANDLE.	10	STD.-510,516
	EXISTING VALVE LOCATON REPLACE EXISTING VALVE W/ NEW DRIP VALVE ASSEMBLY: RAIN BIRD XCZ-100-PRB-R PURPLE CAP DESIGNATES FOR RECLAIMED WATER, NON-POTABLE USE. 1" PESBR VALVE AND 1" PRESSURE REGULATING 40PSI BASKET FILTER. 5-20GPM.	2	D/LI-14
	EXISTING VALVE (PROTECT IN PLACE) EXTEND SYSTEM FROM EXISTING VALVE, COORDINATE WITH UCI MAINTENANCE	1	
	LOCATION OF NEW EXISTING VALVE RELOCATE EXISTING UCI REGENTS REMOTE CONTROL VALVE	23	
	NELSON 7645 1" BRASS QUICK COUPLER VALVE WITH ACME THREADS FOR SLOW FLOW CONTROL, WITH LOCKING RUBBER COVER AND PURPLE CAP WITH RECLAIMED WATER WARNING.	70	STD.-508

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
	NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 1/4" - 3"	22		STD.-506,507
	EZ-FLOW CVB-200 PRESSURE LIMITED TO 38.62 PSI BALL VALVE CONNECTOR - 2"	2		E/LI-14
A B C	36 STATION WEATHERTRAK ETPRO3-SWM CENTRAL SERIES SMART WATER MANAGER WEATHER BASED AUTOMATIC SPRINKLER CONTROLLER MOUNTED WITHIN A "STRONG BOX" SERIES STAINLESS STEEL VANDAL RESISTANT TOP MOUNT CONTROLLER ASSEMBLY BY HYDROSCAPE PRODUCTS (OR EQUAL) - SIZE AND TYPE NOTED ON DRAWING.	3		STD.-515
FS	DATA INDUSTRIAL FSM-150 SERIES PVC TEE FLOW SENSOR FOR IRRIGATION - 1-1/2"	2		STD.-509,518
FX	EZ-FLO FERTILIZING SYSTEMS EZ010-FX ONE SYSTEM FEEDS ALL ZONES, DRIP OR SPRINKLER. TANK CAPACITY: 9.4 G	2		E/LI-14
PX CW CX	WIRE BUNDLE (AS INDICATED FOR FUTURE USE) SPARE CONTROL WIRE BUNDLE FOR FUTURE USE IN JUNCTION BOX. P=PILOT WIRES, C=COMMON WIRES BUNDLED. COIL WIRES IN VALVE BOX, AND RUN CONTINUOUS WIRE BACK TO CONTROLLER. LABEL EACH WIRE WITH A PLASTIC I.D. TAG AT THE WIRE BUNDLE AND AT THE CONTROLLER.	13		STD.-517
BSA	KECKLEY SSGFV SERIES 2" 316SS BASKET STRAINER ASSEMBLY INCLUDING 2" "CLAY-VAL" 92-01G/ BCHSY-KC SOLENOID CONTROLLED PRESSURE REDUCING MASTER VALVE ASSEMBLY, STAINLESS STEEL TRIM, NORMALLY OPEN 24 VOLT SOLENOID WITH FLANGED EPOXY COATED CAST IRON BODY AND NIBCO F-619R	3		STD.-505
M2	NEW 1-1/2" RECLAIMED WATER METER P.O.C. : EXISTING 1-1/2" RECYCLED WATER METER #12726557 AND APPURTENANCES SHALL BE REMOVED. INSTALL NEW 1 1/2" RECYCLED WATER METER AND SERVICE LINE.	1		
M1	NEW 1-1/2" RECLAIMED WATER METER P.O.C.	1		
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE.	5,530 L.F.		STD.-500
	IRRIGATION MAINLINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE. INSTALL MIN. 18" INSIDE CURB OR SIDEWALK (TYPICAL).	11,240 L.F.		STD.-500
	IRRIGATION MAINLINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE.	88.9 L.F.		STD.-500
	PIPE SLEEVE: 4" SCHEDULE 40 WIRE SLEEVE	770.9 L.F.		STD.-501
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	892.3 L.F.		STD.-501



VALVE CALLOUT

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	PRECIP
A-1	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.44	35.88	13.58	0.45 in/h
A-2	RAIN BIRD PESBR	1"	BUBBLER		32.93	33.10	9.60	24.51 in/h
A-3	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.52	36.08	13.92	0.45 in/h
A-4	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.54	36.21	13.99	0.45 in/h
A-5	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.48	36.23	13.76	0.45 in/h
A-6	RAIN BIRD PESBR	1"	BUBBLER		32.42	32.69	8.80	24.51 in/h
A-7	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.19	35.48	8.26	0.45 in/h
A-8	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	791.5	32.95	33.07	3.34	0.45 in/h
A-9	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	1,174	32.94	33.06	2.69	0.45 in/h
A-10	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	639.9	35.40	35.90	12.89	0.45 in/h
A-11	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	114.9	37.89	38.93	16.15	0.45 in/h
A-12	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	1,157	34.39	34.69	8.82	0.45 in/h
A-13	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	610.6	33.69	33.80	6.29	0.45 in/h
A-14	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE	1,086	32.94	33.06	2.39	0.45 in/h
B-1	RAIN BIRD PESBR	1"	BUBBLER		32.84	32.98	8.80	24.51 in/h
B-2	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.10	35.43	11.17	0.45 in/h
B-3	RAIN BIRD PESBR	1"	BUBBLER		32.78	33.06	9.60	24.51 in/h
B-4	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		34.59	34.89	9.47	0.45 in/h
B-5	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		33.02	33.22	3.92	0.45 in/h
B-6	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.43	36.34	11.72	0.45 in/h
B-7	RAIN BIRD PESBR	1"	BUBBLER		32.31	32.71	7.20	24.51 in/h
B-8	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.34	36.62	13.11	0.45 in/h
B-9	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		32.94	33.10	2.66	0.45 in/h
B-10	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.10	35.35	11.23	0.45 in/h
B-11	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.19	35.59	11.48	0.45 in/h
B-12	RAIN BIRD PESBR	1"	BUBBLER		32.67	32.89	8.80	24.51 in/h
B-13	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.60	36.26	12.47	0.45 in/h
B-14	RAIN BIRD PESBR	1"	BUBBLER		32.71	33.08	9.60	24.51 in/h
B-15	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.74	36.53	12.53	0.45 in/h
B-16	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		32.97	33.16	3.86	0.45 in/h
B-17	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		36.30	38.41	16.92	0.45 in/h
B-18	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		36.25	37.79	16.74	0.45 in/h
B-19	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		36.25	37.33	16.77	0.45 in/h
B-20	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		35.88	36.57	15.79	0.45 in/h
B-21	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		37.55	38.42	14.54	0.45 in/h
B-22	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		36.26	37.95	16.71	0.45 in/h
B-23	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		33.86	34.24	6.80	0.45 in/h
B-24	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		33.19	33.46	5.44	0.45 in/h
B-25	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		33.23	33.44	5.55	0.45 in/h
B-26	RAIN BIRD PESBR	1"	BUBBLER		32.53	32.68	6.40	24.51 in/h
B-27	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		34.71	34.98	10.45	0.45 in/h
B-28	RAIN BIRD PESBR	1"	BUBBLER		32.08	32.20	6.40	24.51 in/h
B-29	RAIN BIRD XCZ-100-PRB-R	1"	AREA FOR DRIPLINE		34.90	35.19	11.25	0.45 in/h
B-30	RAIN BIRD PESBR	1"	BUBBLER		31.79	31.95	6.40	24.51 in/h
Unknown	EXISTING VALVE LOCATON	1"	AREA FOR DRIPLINE		33.02		9.32	0.45 in/h
Unknown	EXISTING VALVE (PROTECT IN PLACE)	1"	SHRUB ROTOR		32.21		13.20	0.38 in/h
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE		1.10		0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	TURF ROTOR		41.91		13.50	0.54 in/h
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE		1.10		0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE		1.10		0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	TURF ROTOR		38.62		8.40	0.37 in/h
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE		1.10		0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE		1.10		0.00	Unknown
Unknown	EXISTING VALVE LOCATON	1"	AREA FOR DRIPLINE		33.23		12.53	0.45 in/h
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE				0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE				0.00	Unknown
Unknown	LOCATION OF NEW EXISTING VALVE	1"	AREA FOR DRIPLINE				0.00	Unknown

MAINTENANCE AREA RESPONSIBILITY

ALL IRRIGATION SYSTEMS SERVICED BY THE CITY OF IRVINE WATER METERS SHALL BE OWNED, OPERATED AND MAINTAINED BY THE CITY OF IRVINE AND SHALL COMPLY WITH THE LATEST EDITION OF THE CITY OF IRVINE LANDSCAPE MANUAL AND STANDARD PLANS AND THE SPECIAL PROVISIONS.

UCI — VALVES, PIPING AND SPRINKLERS SHOWN WITH IN UCI REGENT PROPERTY SHALL BE OWNED, OPERATED AND MAINTAINED BY UCI REGENTS

HOA — VALVES, PIPING AND SPRINKLERS SHOWN WITH IN HOA REGENT PROPERTY SHALL BE OWNED, OPERATED AND MAINTAINED BY HOA REGENTS

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

IRRIGATION SLEEVE SIZES

PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
SLEEVE SIZE	3"	3"	3"	4"	4"	4"	6"

NOTE: IRRIGATION CONTROL WIRE SLEEVE SIZE SHALL BE 4" UNLESS OTHERWISE SPECIFIED.

SLEEVES ARE REQUIRED FOR ALL IRRIGATION PIPING INSTALLED UNDER PAVING AREAS. REFER TO IRRIGATION SLEEVE SIZING CHART SHOWN ON THIS SHEET FOR IRRIGATION SLEEVE SIZE. (TYPICAL) NOTE: FOR DRAWING CLARITY ALL IRRIGATION SLEEVES ARE NOT SIZED, BUT SHALL BE INSTALLED AND INCLUDED AS A PART OF THE CONTRACTOR'S BID. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE ITSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, FOOTINGS, ETC AND COORDINATE ITS WORK WITH OTHER TRADES FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER FOOTINGS, UNDER ROADWAYS, UNDER PAVING, STRUCTURES, ETC.

Zone Information / Irrigation Runtime

HYDROZONE	VALVE #	GPM	PLANT FACTOR	IRRIG. AMOUNT REQUIRED	PREC. RATE	MIN. MINUTES PER DAY	MAX. MINUTES PER DAY	CYCLES PER DAY	MIN. SOAK TIME	MIN. ACTUAL RUNTIME	MAX. ACTUAL RUNTIME
AREA FOR DRIPLINE	A-1	13.58	0.2	0.60	0.45	80	86	3	79	27	29
BUBBLER	A-2	9.60	0.2	0.90	24.51	3	3	3	79	1	1
AREA FOR DRIPLINE	A-3	13.92	0.2	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	A-4	13.99	0.2	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	A-5	13.76	0.2	0.60	0.45	80	86	3	79	27	29
BUBBLER	A-6	8.80	0.2	0.90	24.51	3	3	3	79	1	1
AREA FOR DRIPLINE	A-7	8.26	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-8	3.34	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-9	2.69	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-10	12.89	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-11	16.15	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-12	9.02	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-13	7.10	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	A-14	5.78	0.2	0.60	0.45	80	92	3	34	27	31
BUBBLER	B-1	8.80	0.2	0.90	24.51	3	3	3	34	1	1
AREA FOR DRIPLINE	B-2	11.17	0.2	0.60	0.45	80	92	2	27	40	46
BUBBLER	B-3	9.60	0.2	0.90	24.51	3	3	3	34	1	1
AREA FOR DRIPLINE	B-4	9.47	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-5	3.92	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-6	11.72	0.2	0.60	0.45	80	92	3	34	27	31
BUBBLER	B-7	8.00	0.2	0.90	24.51	3	3	3	34	1	1
AREA FOR DRIPLINE	B-8	13.11	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-9	2.66	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-10	11.23	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-11	11.48	0.2	0.60	0.45	80	86	3	79	27	29
BUBBLER	B-12	8.80	0.2	0.90	24.51	3	3	3	79	1	1
AREA FOR DRIPLINE	B-13	12.47	0.2	0.60	0.45	80	86	3	79	27	29
BUBBLER	B-14	9.60	0.2	0.90	24.51	3	3	3	34	1	1
AREA FOR DRIPLINE	B-15	12.53	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-16	3.86	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-17	16.92	0.4	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-18	16.74	0.4	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-19	16.77	0.4	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	B-20	15.79	0.4	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	B-21	14.54	0.4	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	B-22	16.71	0.4	0.60	0.45	80	86	3	79	27	29
AREA FOR DRIPLINE	B-23	6.80	0.4	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-24	5.44	0.2	0.60	0.45	80	92	3	34	27	31
AREA FOR DRIPLINE	B-25	5.55	0.2	0.60	0.45	80	92	3	34	27	31
BUBBLER	B-26	6.40	0.2	0.90	24.51	3	3	3	34	1	1
AREA FOR DRIPLINE	B-27	10.45	0.2	0.60	0.45	80	92	3	34	27	31
BUBBLER	B-28	6.40	0.2	0.90	24.51	3	3	3	79	1	1
AREA FOR DRIPLINE	B-29	11.25	0.2	0.60	0.45	80	86	3	79	27	29
BUBBLER	B-30	6.40	0.2	0.60	24.51	2	2	2	79	1	1

Historical ET - Irvine, CA

JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	Yearly
2.18	2.49	3.67	4.71	5.18	5.87	6.29	6.17	4.57	3.66	2.59	2.25	49.63

of Watering Days per Month - After Establishment

JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	YEAR
1	1	2	2	2	2	3	3	2	2	1	1	22
1	1	1	2	2	2	2	2	2	1	1	1	18
1	1	2	2	2	2	3	3	2	2	1	1	22
1	1	2	2	2	2	3	3	2	2	1	1	22
1	1	2	2	2	2	3	3	2	2	1	1	22
1	1	1	2	2	2	2	2	2	1	1	1	18
1	1	2	2	2	2	3	3	2	2	1	1	22

IRWD RECYCLED AND POTABLE WATER NOTES

A. THE INSTALLATION OF THE IRRIGATION WATER SYSTEM SHAL CONFORM TO THE REGULATIONS FOR THE CONSTRUCTION OF IRRIGATION WATER SYSTEMS WITHIN THE IRVINE RANCH WATER DISTRICT (IRWD) AND THE ACCOMPANYING PLANS AND SPECIFICATIONS.

B. ALL ONSITE RECYCLED AND POTABLE WATER PIPING INSTALLED ON THIS PROJECT SHALL BE IDENTIFIED IN ACCORDANCE WITH IRWD'S REGULATIONS AND THE IRRIGATION SPECIFICATIONS.

C. RECYCLED WATER PIPING SHALL BE PURPLE PVC MANUFACTURED FOR RECYCLED (RECLAIMED) WATER SYSTEMS.

D. MARKING ON THE PURPLE PVC SHALL INCLUDE THE FOLLOWING:

CAUTION RECYCLED (OR RECLAIMED) WATER, NOMINAL PIPE SIZE, PVC-1120: PRESSURE RATING IN POUNDS PER SQUARE INCH AT 73 DEGREES; ASTM DESIGNATIONS SUCH AS 1785, 2241, 2672, 3139, PRINTING SHALL BE PLACED CONTINUOUSLY ON TWO SIDES OF PIPE.

E. ALL RECYCLED WATER SPRINKLER BOX COVERS AND CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS AND ALL APPURTENANCES SHALL BE TAGGED WITH IDENTIFICATION TAGS.

1. TAGS SHALL BE WEATHERPROOF PLASTIC, 3" X 4" PURPLE IN COLOR WITH THE WORDS "WARNING RECYCLED (OR RECLAIMED) WATER - DO NOT DRINK" IMPRINTED ON ONE SIDE, AND "AVIGA AQUA IMPURA - NO TOMAR" ON THE OTHER SIDE. IMPRINTING SHALL BE PERMENANT AND BLACK IN COLOR. USE TAGS AS MANUFACTURERD BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.

2. ONE TAG SHALL BE ATTACHED TO EACH APPURTENANCE AS FOLLOWS:

IDENTIFICATION SHALL BE AFFIXED TO EACH IRRIGATION VALVE LID COVER AND VALVE AS FOLLOWS:

a. IDENTIFY VALVE COVER WITH LABEL OR BRANDED HOT STAMP THAT READS "RECYCLED (OR RECLAIMED) WATER DO NOT DRINK" OR USE PURPLE COVER WITH SAME.

b. ATTACH TAG TO CONTROL VALVE STEM DIRECTLY WITH PLASTIC TIE-WRAP.

OR

c. ATTACH TAG TO CONTROL VALVE SOLENIOD WIRE DIRECTLY WITH PLASTIC TIE-WRAP.

d. ATTACH TAG TO BODY OF RELATED APPURTENANCE WITH A PLASTIC TIE-WRAP.

F. WARNING TAPES SHALL BE USED ON ALL CONTANT PRESSURE MAIN LINE PIPING CARRYING POTABLE WATER.

G. WARNING TAPE SHALL BE A MINIMUM OF 3 INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSURE MAIN LINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND THE WARNING TAPE AND THE PIPE EVERY 5 FEET ON CENTER.

H. WARNING TAPE FOR THE CONSTANT PRESSURE MAIN LINE PIPING SHALL BE BLUE IN COLOR WITH THE WORDS "CAUTION BURIED WATERLINE BELOW" IMPRINTED IN MINIMUM 1-INCH HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMENANT.

I. IRWD SHALL BE NOTIFIED TWO DAYS PRIOR TO THE START OF IRRIGATION CONSRTUCTION AT (949)453-5300 AND EACH WORK DAY THEREAFTER UNTIL THE COMPLETION OF THE WORK.

J. ALL PRESSURE MAIN LINE PIPING FROM THE RECYCLED WATER SYSTEM SHALL BE INSTALLED TO MAINTAIN 10 FEET MINIMUM HORIZONTAL SEPARATION FROM ALL POTABLE PIPING. WHERE RECYCLED AND POTABLE PRESSURE MAINLINE PIPING CROSS, THE RECYCLED WATER PIPING SHALL BE INSTALLED BELOW THE POTABLE WATER PIPING IN A CLASS 200 PURPLE PVC SLEEVE WHICH EXTENDS A MINIMUM OF 5 FEET ON EITHER SIDE OF THE POTABLE WATER PIPING. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 6-INCHES. CONVENTIONAL (WHITE) PVC PIPE MAY BE USED FOR SLEEVING AMTERIAL IF IT IS TAPED WITH 3-INCH WIDE PURPLE WARNING TAPE WHICH READS "CAUTION RECYCLED (OR RECLAIMED) WATER".

K. THE IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE BETWEEN THE HOURS OF 9:00PM AND 6:00AM UNLESS OTHERWISE DIRECTED BY THE DISTRICT ENGINEER.

L. ALL NEW COMMON AREAS WHERE RECYCLED WATER IS USED AND THAT ARE ACCESIBLE TO THE GENERAL PUBLIC SHALL BE POSTED WITH CONSPICUOUS SIGNS THAT INCLUDE THE FOLLOWING WORDING IN A SIZE NO LESS THAN 4 INCHES HIGH BY 8 INCHES WIDE "RECYCLED WATER - NO NOT DRINK" , OR "RECLAIMED WATER - DO NOT DRINK". EACH SIGN SHALL ALSO DISPLAY AN INTERNATIONAL SYMBOL CONVEYING THE SAME WARNING.

M. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE APTIOS, STREETS AND SIDEWALKS.

N. CONTACT THE IRWD OFFICE TWO DAYS PRIOR TO THE IRRIGATION SYSTEM COVERAGE TEST AT (949)453-5300 AND ARRANGE A WALK-THROUGH OF THE SYSTEM.

O. FALUIRE TO COMPLY WITH ANY OR ALL OF THE ABOVE GUIDELINES WILL PLACE THE SYSTEM IN VIOLATION OF THE IRWD RULES AND REGULATIONS, AND WILL RESULT IN TERMINATION OF SERVICE UNTIL APPROPRIATE CORRECTIVE MEASURES HAVE BEEN TAKEN.

P. WARNING TAPE ON RECYCLED WATER CONSTANT PRESSURE MAIN PIPING IS ONLY ALLOWED ON PROJECT-BY PROJECT APPROVAL FROM THE DISTRICT ENGINEER. IF APPROVED, IT MUST FOLLOW THESE INSTALLATION SPECIFICATIONS.

1. WARNING TAPE SHALL BE USED ON ALL CONSTANT PRESSURE MAINS.

2. WARNING TAPE SHALL BE A MINIMUM OF 3-INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF THE CONSTANT PRESSURE MAIN LINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND THE WARNING TAPE AND THE PIPE EVERY 5 FEET ON CENTER.

3. WARNING TAPE FOR THE CONSTANT PRESSURE RECYCLED WATER PIPING SHALL BE PURPLE IN COLOR WITH THE WORDS "CAUTION - RECYCLED (OR RECLAIMED) WATER" IMPRINTED IN MINIMUM 1-INCH HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMENANT.

Q. ON-SITE SYSTEMS MAINTENANCE: ALL REPAIRS AND MODIFICATIONS MUST BE REVIEWED AND APPROVED BY THE DISTRICT'S ON-SITE WATER SYSTEMS GROUP IN A MANNER CONSISTENT WITH THE REQUIREMENTS HEREIN.

OBSTRUCTIONS

WHEN VERTICAL OBSTRUCTIONS (PROPS, STREET LIGHTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS SO AS TO PREVENT PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. (TYPICAL)

GENERAL NOTE

ALL IRRIGATION EQUIPMENT SHOWN IN GRAY TONE INDICATE EXISTING CONDITIONS. ALL SYMBOLS INDICATED ON PLAN SHEETS FOR SPRINKLER HEADS AND IRRIGATION EQUIPMENT SHOWN IN SOLID TONE INDICATE NEW CONDITIONS. VERIFY EXITING CONDITIONS IN THE FIELD PRIOR TO START OF WORK.

DEMOLITION NOTE

DURING GRUB & CLEARING, CONTRACTOR SHALL CUT/CAP/ABANDON BELOW GRADE/ REMOVE AT-GRADE IRRIGATION APPURTENANCES WITHIN PROJECT INFLUENCE. IRRIGATION EQUIPMENT REMOVED WITHIN UCI REGENTS CONTROL SHALL BE RECONNECTED AS SHOWN ON THE DRAWINGS INCLUDING BUT NOT UNLIMITED TO: MAINLINE PIPE, LATERAL LINE PIPE, REMOTE CONTROL VALVES, QUICK COUPLER VALVES, GATE VALVES, CONTROL WIRING, SPRINKLER AND/OR ROTOR HEADS OF SIMILAR TYPE.

GENERAL IRRIGATION NOTES

ALL MAIN LINE PIPING AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES. MAIN LINE SLEEVE SIZE SHALL BE A MINIMUM OF TWICE THE DIAMETER OF THE PIPE TO BE SLEEVED OR AS INDICATED ON THE DRAWINGS. CONTROL WIRE SLEEVES SHALL BE OF SUFFICENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING. IN ADDITION TO THE SLEEVES SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF SLEEVES UNDER ALL PAVED AREAS.

ALL LATERAL LINE PIPING UNDER PAVING SHALL BE PVC SCHEDULE 40 PIPE AND SHALL BE INSTALLED PRIOR TO PAVING.

PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE SAID TIME OF REJECTION.

FINAL LOCATION OF THE AUTOMATIC CONTROLLER SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.

120 V.A.C. ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER.

ALL SPRINKLER HEADS SHALL BE PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.

ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN SHRUB OR GROUND COVER AREAS SHALL BE INSTALLED SO THAT THE TOP OF THE SPRINKLER HEAD IS 1" ABOVE FINISH GRADE.

ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN LAWN AREAS SHALL BE INSTALLED SO THAT THE TOP OF THE SPRINKLER HEADS ARE FLUSH WITH ADJACENT SIDEWALK OR CURB.

ADJUSTING OF ALL LAWN HEADS BY THE CONTRACTOR, SO THAT THE TOP OF THE SPRINKLER HEAD IS 1/4" ABOVE FINISH GRADE, SHALL BE ACCOMPLISHED WITHIN TEN (10) DAYS AFTER NOTIFICATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE WITH MINIMUM OVER SPRAY ONTO WALKS, STREETS, WALLS, ETC. THIS SHALL INCLUDE THE USE OF RAINBIRD "PCS" PRESSURE COMPENSATING SCREENS, SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.

THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE. THE CONTRACTOR SHALL LOCATE ALL VALVES IN SHRUB AREAS.

IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, STRUCTURES AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.

DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILED INFORMATION.

ADV (ANTI-DRAIN VALVES) UNITS AS SHOWN IN THE DETAILS ARE FOR TYPICAL INSTALLATION ONLY AND MAY NOT BE REQUIRED ON ALL HEADS. PRIOR TO INSTALLATION THE CONTRACTOR SHALL VERIFY WITH THE ON-SITE GRADES. IF THERE IS AN ELEVATION DIFFERENCE OF 24" OR MORE BETWEEN THE HIGHEST HEAD AND THE LOWEST HEAD ON A SYSTEM, THE ADVS SHALL BE INSTALLED PER THE DETAIL. NO LOW HEAD DRAINAGE ALLOWED

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS AT THE SITE PRIOR TO COMMENCEMENT WITH ANY WORK UNDER THIS CONTRACT.

THE CONTRACTOR SHALL CARRY ALL WORKMAN'S COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY THE OWNER.

INSTALL ALL EQUIPMENT AND MATERIALS AS SHOWN ON THE DRAWINGS AND PER THE SPECIFICATIONS. USE TEFLON TAPE OR TEFLON PIPE DOPE ON ALL PVC TO PVC MALE PIPE THREADS ON ALL SPRINKLER SWING JOINT AND VALVE ASSEMBLIES.

PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT AND COORDINATE ALL INSPECTIONS

EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION AND CONDITION OF ALL UTILITIES AND BE RESPONSIBLE FOR DAMAGE TO ANY UTILITIES.

THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE OWNER.

THIS SYSTEM DESIGN IS BASED ON THE REGULATED OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

THE CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS AND RUBBISH INCIDENTAL TO HIS WORK.

ALL PRESSURE LINES SHALL BE TESTED UNDER HYDROSTATIC PRESSURE OF 150 PSI FOR TWO HOURS AND SHALL BE PROVEN WATER TIGHT.

ALL IRRIGATION WORK SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK.

ALL MATERIALS AND EQUIPMENT SHALL CONFORM TO APPLICABLE STATE OF CALIFORNIA AND LOCAL CODES.

IRRIGATION SLEEVE SIZES

PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
SLEEVE SIZE	3"	3"	3"	4"	4"	4"	6"

NOTE: IRRIGATION CONTROL WIRE SLEEVE SIZE SHALL BE 4" UNLESS OTHERWISE SPECIFIED.

SLEEVES ARE REQUIRED FOR ALL IRRIGATION PIPING INSTALLED UNDER PAVING AREAS. REFER TO IRRIGATION SLEEVE SIZING CHART SHOWN ON THIS SHEET FOR IRRIGATION SLEEVE SIZE. (TYPICAL) NOTE: FOR DRAWING CLARITY ALL IRRIGATION SLEEVES ARE NOT SIZED, BUT SHALL BE INSTALLED AND INCLUDED AS A PART OF THE CONTRACTOR'S BID. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE ITSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, FOOTINGS, ETC AND COORDINATE ITS WORK WITH OTHER TRADES FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER FOOTINGS, UNDER ROADWAYS, UNDER PAVING, STRUCTURES, ETC.

RECYCLED WATER GUIDELINES

THE FOLLOWING GUIDELINES HAVE BEEN ESTABLISHED BY THE IRVINE RANCH WATER DISTRICT IN CONJUCTION WITH THE ORNAGE COUNTY HEALTH DEPARTMENT AND THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD. THEY ARE TO PROVIDE THE BASIC PARAMETERS FOR THE USE OF RECLAIMED WATER IN LANDSCAPE IRRIGATION. TO OPERATE YOUR SYSTEM IN COMPLIANCE WITH THESE GUIDELINES YOU MUST:

1. IRRIGATE BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. ONLYIWATERING OUTSIDE THAT TIME FRAME MUST BE DONE MANUALLY WITH QUALIFIED SUPERVISORY PERSONNEL ON-SITE. NO SYSTEM SHALL AT ANY TIME BE LEFT UNATTENDED DURING USE OUTSIDE THE NORMAL SCHEDULE.
2. IRRIGATE IN A MANNER THAT WILL MINIMIZE RUNOFF POOLING AND PONDING. THE APPLICATION RATE SHALL NOT EXCEED THE INFILTRATION RATE OF THE SOIL. TIMERS MUST BE ADJUSTED SO AS TO BE COMPATIBLE WITH THE LOWEST SOIL INFILTRATION RATE PRESENT. THIS PROCEDURE MAY BE FACILITED BY THE EFFICIENT SCHEDULING OF THE SUTOMATIC CONTROL CLOCKS, (I.E. EMPLOYING THE REPEAT FUNCTION TO BREAK UP THE TOTAL IRRIGATION TIME INTO CYCLES THAT WILL PROMOTE MAXIMUM SOIL ABSORBTION).
3. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE PATIOS, STREETS AND SIDEWALKS.
4. MONITOR AND MAINTAIN THE SYSTEM TO MINIMIZE EQUIPMENT AND MATERIAL FALUIRE. BROKEN SPRINKLER HEADS, LEAKS, UNRELIABLE VALVES, ETC., SHOULD BE REPARIED AS SOON AS THEY BECOME APPARENT.
5. EDUCATE ALL MAINTENANCE PERSONNEL, ON A CONTINUOUS BASIS OF THE PRESENSE OF RECLAIMED WATER, AND THE FACT THAT IT IS NOT APPROVED FOR DRINKING PURPOSES. GIVEN THE HIGH TURN OVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY, IT IS IMPORTANT THAT THIS INFORMATION BE DISSEMINATED ON AN ALMOST DAILY BASIS. IT IS YOU, THE LANDSCAPE CONTRACTOR, WHO IS RESPONSIBLE FOR EDUCATING EACH AND EVERY ONE OF YOUR EMPLOYEES.
6. OBTAIN PRIOR APPROVALFOR ALL PROPOSED CHANGES AND MODIFICATIONS TO ANY ON-SITE FACILITIES. SUCH CHANGES MUST BE SUBMITTED TO, AND APPROVED BY, THE DISTRICT ENGINEERING OFFICE AND DESIGNED IN ACCORDANCE WITH DISTRICT STANDARDS.
7. FALUIRE TO COMPLY WITH ANY OR ALL OF THE ABOVE GUIDELINES PUTS YOUR SYSTEM IN VIOLATION OF THE DISTRICTS RULES AND REGULATIONS, AND WILL RESULT IN TERMINATION OF SERVICE UNTIL APPROPRIATE CORRECTIVE MEASURES HAVE BEEN TAKEN.
8. THE IRVINE RANCH WATER DISTRICT FEELS THAT THE BENEFITS TO BE DERIVED FROM THE SUCCESSFUL APPLICATION OF RECLAIMED WATER MERIT THE OPERATING REQUIREMENTS THAT HAVE BEEN ESTABLISHED. IF YOU HAVE ANY QUESTIONS, OR IF YOU NEED ANY ASSISTANCE, PLEASE DO NOT HESITATE TO CALL OUR IRRIGATION WATER GROUP AT (949)453-5300.

RWQCB REQUIRED INFORMATION

A. THE AVERAGE NUMBER OF PEOPLE AT THIS USE SITE ON A DAILY BASIS.
NOT KNOWN; BUT BIKE TRAIL AND PUBLIC SIDEWALK ARE HEAVILY USED

B. BOUNDARIES TO THE PROPOSED USE SITE, FOOTPRINT OF ANY FACILITIES ON THE PREMISES, DRINKING WATER FOUNTAINS, AND ANY RECYCLED WATER OR POTABLE WATER IMPOUNDMENT TO BE USED.
USE AREAS SHOWN ON PLANS; FACILITIES IDENTIFIED ON CIVIL & UTILITY DRAWINGS UNLESS OTHERWISE SHOWN ON THESE IRRIGATION DRAWINGS (I.E. WATER METER). NO DRINKING FOUNTAINS WITHIN PROJECT. NO IMPOUNDMENT WITHIN PROJECT.

C. THE PERSON OR PERSONS RESPONSIBLE FOR THE OPERATION OF THE RECYCLED WATER SYSTEM AT EACH USE AREA.
MARC GIOVENNELLA LANDSCAPE MAINTENANCE SUPERIOR 949.724.7630

D. THE SPECIFIC USE TO BE MADE OF THE RECYCLED WATER AT EACH USE AREA.
LANDSCAPE OF MEDIANS AND PARKWAYS

E. THE METHODS TO BE USED TO ASSURE THAT INSTALLATION AND OPERATION OF THE RECYCLED WATER SYSTEM WILL NOT RESULT IN CROSS CONNECTIONS BETWEEN THE RECYCLED WATER AND THE POTABLE WATER PIPING SYSTEMS. DESCRIBE THE PRESSURE TEST DONE BEFORE INSTALLATION OF THE METER.
EXISTING FACILITIES ARE RECYCLED AND BEING UPGRADED FOR STREET WIDENING. IRWD OFFICIALS WILL BE INSPECTING FACILITIES.

F. PIPE LOCATIONS OF BOTH RECYCLED WATER AND POTABLE SYSTEMS, OR BRIEF EXPLANATION FOR THE EXCLUSION OF SYSTEM NOT SHOWN.
UTILITIES SHOWN ON UTILITY DRAWINGS

NOTE: ABOVE INFORMATION TO BE COMPLETED BY IRWD AT COMPLETION AND APPROVAL OF PROJECT BY IRWD.

EQUIPMENT LOCATION NOTE

1. INSTALL ALL IRRIGATION EQUIPMENT, PRESSURE MAIN LINE PIPING, CONTROL VALVES, ETC. WITHIN PLANTING AREA - ANY IRRIGATION EQUIPMENT SHOWN OUTSIDE OF PLANTING AREA IS FOR DRAWING CLARITY (TYPICAL).
2. AUTOMATIC CONTROLLER AND ALL OTHER ABOVE GROUND IRRIGATION EQUIPMENT LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. STAKE OUT ABOVE GRADE IRRIGATION EQUIPMENT LOCATIONS FOR REVIEW AND APPROVAL BY OWNER PRIOR TO INSTALLATION. FINAL LOCATION AND EXACT POSITIONING ABOVE GRADE IRRIGATION EQUIPMENT SHALL BE DETERMINED BY THE OWNER. MINOR MODIFICATIONS OF ABOVE GRADE IRRIGATION EQUIPMENT LOCATIONS AS REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO INSTALLATION SHALL CAUSE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO OWNER.
3. ELECTRIC CONTROL VALVE, QUICK COUPLING VALVE AND GATE VALVE, ETC. LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE CONTRACTOR SHALL STAKE OUT EACH ELECTRIC CONTROL VALVE, QUICK COUPLING VALVE AND GATE VALVE, ETC. LOCATION FOR REVIEW AND APPROVAL BY OWNER PRIOR TO INSTALLATION OF VALVES. SEE DETAILS FOR ADDITIONAL VALVE INSTALLATION INFORMATION. FINAL LOCATION AND EXACT POSITIONING OF IRRIGATION EQUIPMENT SHALL BE APPROVED BY THE OWNER. MINOR MODIFICATIONS OF IRRIGATION EQUIPMENT LOCATIONS AS REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO INSTALLATION SHALL CAUSE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO OWNER.

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

DIGALERT
DIAL BEFORE YOU DIG TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY III No. 2214 Signature 7.10.17 Date 8/31/2018 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

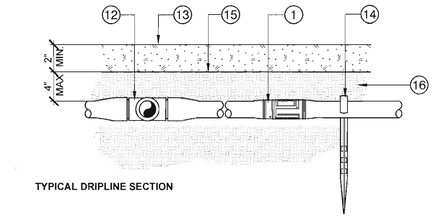
ARTHUR D. GUY RLA #2214 7.10.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

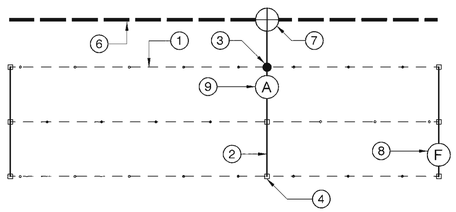
UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION NOTES
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

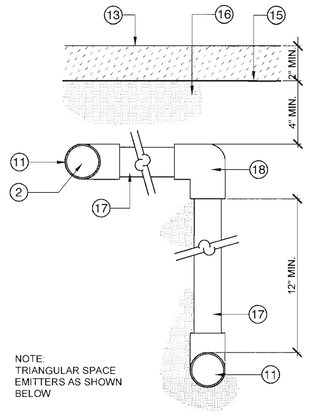
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SHEET 58 OF 87



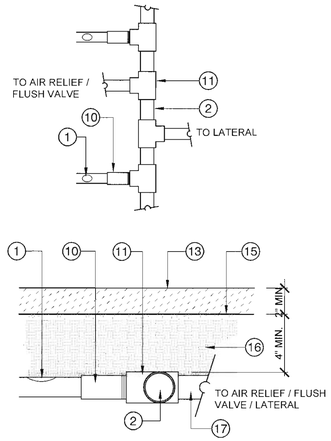
TYPICAL DRIPLINE SECTION



NOTE:
TRIANGULAR SPACE EMITTERS AS SHOWN BELOW



PVC LATERAL TO SUPPLY HEADER



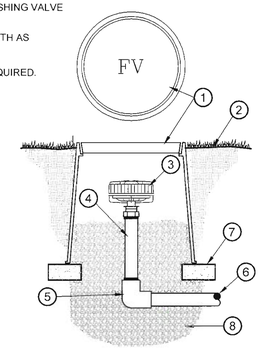
PIPE TRANSITION FROM SUPPLY HEADER TO DRIP TUBING

1. PRESSURE-COMPENSATING IN-LINE EMITTER TUBING: SEE LEGEND
2. PVC SUPPLY HEADER
3. PVC RISER FROM 12" LATERAL TO 4" SUPPLY HEADER
4. PIPE TRANSITION POINT FROM PVC HEADER TO EMITTER TUBING
6. PVC MAINLINE - SEE PLAN
7. XERIGATION CONTROL VALVE - SEE LEGEND
8. FLUSH VALVE AT LOW POINT OF SYSTEM - SEE LEGEND
9. AIR RELIEVE VALVE AT HIGH POINT OF SYSTEM - SEE LEGEND
10. ½" COMP X ¾" MPT ADAPTER
11. SCH 40 PVC TEE (SxSxT)
12. BARB x BARB TEE
13. TOP OF MULCH (SEE SPECS)
14. TIE DOWN STAKE @ 6'-0" O.C. AND AT BENDS AND ENDS.
15. FINISHED GRADE
16. TOP SOIL COVER
17. PVC SCH 40
18. PVC SCH 40 ELBOW

A TYPICAL DRIP LINE SYSTEM LAYOUT

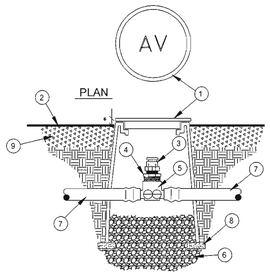
SCALE: 1" = 1" PLAN

1. 10" ROUND VALVE BOX W/BOLT-DOWN COVER. HEAT BRAND "FV" ON VALVE BOX LID IN 2" HIGH CHARACTERS.
2. FINISH GRADE.
3. NETAFIM AUTOMATIC LINE FLUSHING VALVE TL050MFV-1.
4. 1/2" PVC SCH. 80 NIPPLE - LENGTH AS REQUIRED.
5. PVC S X T 90° ELL - SIZE AS REQUIRED.
6. PVC PIPE TO EXHAUST HEADER.
7. COMMON BRICK - (2 REQUIRED).
8. 3/4" CRUSHED ROCK - 8" DEPTH.



B DRIPLINE FLUSH VALVE

SCALE: N.T.S. SECTION

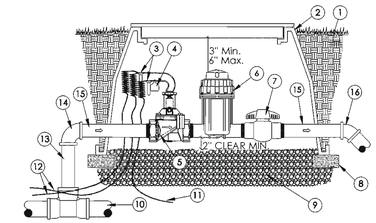


LEGEND

1. RAIN BIRD SUBTERRANEAN EMITTER BOX MODEL # SEB-6X - HEAT BRAND "AV" ON VALVE BOX COVER IN 2" HIGH LETTERS.
2. FINISH GRADE.
3. AIR / VACUUM RELIEF VALVE.
4. 3/4"M x 1/2"F REDUCTION BUSHING.
5. NETAFIM Techline 180 2-WAY ADAPTER TEE.
6. 3/4" CRUSHED ROCK. 6" MINIMUM DEPTH.
7. RAIN BIRD XF SERIES DRIPLINE.
8. COMMON BRICK (2 REQUIRED).
9. MULCH PER LANDSCAPE PLAN. PROVIDE A 3" MINIMUM DEPTH OF MULCH OVER DRIPPERLINE.

C AIR/ VACUUM VALVE

SCALE: N.T.S. SECTION



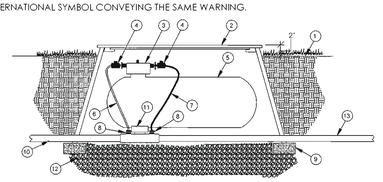
LEGEND

1. TOP OF MULCH OR FINISH GRADE.
2. JUMBO RECTANGULAR VALVE BOX WITH BOLT DOWN COVER. HEAT BRAND VALVE STATION NO. ON LID IN 2" HIGH CHARACTERS.
3. 3m DBY WIRE CONNECTORS.
4. CHRISTY'S I.D.TAG - NUMBERED TO MATCH DRAWINGS.
5. GRISWOLD DWS SERIES 1" BRASS ELECTRIC CONTROL VALVE.
6. RAIN BIRD PRB-QKCHK-100 SERIES 1" PRESSURE REGULATING BASKET FILTER WITH 200 MESH SCREEN.
7. SPEARS 1" SCHEDULE 80 BALL VALVE.
8. COMMON BRICK (4 REQUIRED).
9. 3/4" CRUSHED ROCK. 6" DEEP.
10. MAIN LINE FITTING W/SOLVENT WELD OUTLET.
11. COMMON WIRE TO OTHER VALVES ON SAME CONTROLLER.
12. CONTROL/COMMON WIRES FROM CONTROLLER.
13. PVC SCHEDULE 40 PIPE.
14. PVC SxS 90° ELL.
15. 1" SCHEDULE 80 TOE NIPPLE.
16. SCHEDULE 40 PVC PIPE TO DRIP SYSTEM - ANGLE PIPE TO SPECIFIED DEPTH WITH 45° ELLS.

D DRIPPERLINE CONTROL VALVE ASSEMBLY

SCALE: N.T.S. FOR FLOWS 20 GPM OR LESS

ALL VALVE BOXES USED IN CONJUNCTION WITH IRRIGATION SYSTEMS CARRYING RECYCLED WATER AND ARE ALSO INSTALLED WITHIN THE SBWR SERVICE AREA SHALL BE BLACK IN COLOR. PURPLE LIDS WILL NOT BE ALLOWED. CONTRACTOR SHALL SPECIAL ORDER BLACK VALVE BOX LIDS TO CONFORM TO SBWR REQUIREMENTS AND SHALL INCLUDE THE WORDS "RECYCLED WATER - DO NOT DRINK" AND SHALL HAVE THE INTERNATIONAL SYMBOL CONVEYING THE SAME WARNING.



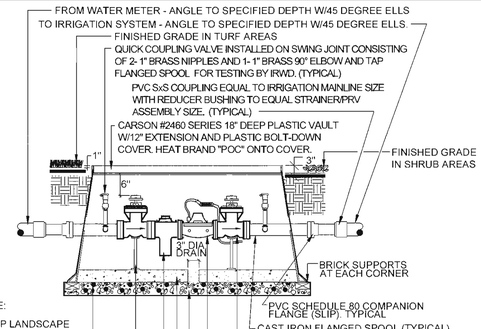
1. FINISHED GRADE.
2. VALVE BOX & COVER 30" L X 18"D X 17" W. HEAT BRAND VALVE "FPS" ON LID IN 2" HIGH CHARACTERS.
3. PROPORTIONING CAP WITH FEED ADJUSTMENT KNOB.
4. EZ-FLO SHUT OFF VALVES.
5. EZ-FLO MODEL EZ010-FX FERTILIZING SYSTEM 7" L X 12" D X 14" H.
6. FERTILIZER OUT - CONNECT CLEAR TUBE TO GREEN CONNECTIONS ON PROPORTIONING CAP AND COUPLING.
7. WATER IN - CONNECT BLACK TUBE TO BLUE CONNECTIONS ON PROPORTIONING CAP AND COUPLING.

NOTE:
ITEMS 3, 4, 5, 6, 7 AND 8 ARE INCLUDED WITH THE EZ-FLO SYSTEM. ITEM 11 IS PURCHASED SEPARATELY.

8. 1/4" TUBING CLAMP - BOTH THE GREEN AND BLUE COUPLING TUBING CONNECTIONS.
9. COMMON BRICK (4 REQUIRED).
10. PVC MAIN LINE TO IRRIGATION CONTROL VALVES.
11. EZ BALL VALVE COUPLING CONNECTOR - INSTALL ACCORDING TO WATER FLOW DIRECTION ARROW. INSTALL EZ-BALL IN SEPARATE 10" ROUND VALVE BOX W/GREEN BOLT DOWN COVER. HEAT BRAND VALVE "CVB" ON LID IN 2" HIGH CHARACTERS.
12. 3/4" CRUSHED ROCK. 8" DEEP.
13. PVC MAIN LINE FROM IRRIGATION POINT OF CONNECTION.

E FERTILIZER PROPORTIONING SYSTEM

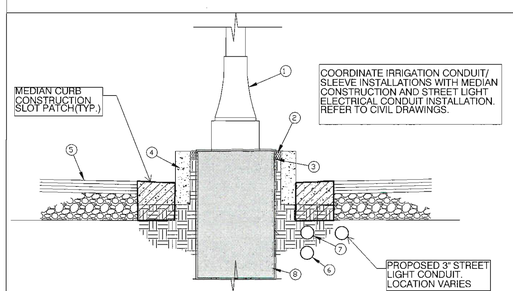
SCALE: N.T.S. SECTION



NOTE:
WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS. ALL FLANGED CONNECTIONS SHALL USE STAINLESS STEEL NUTS AND BOLTS.

F STRAINER/ MASTER VALVE

SCALE: N.T.S. MODIFIED STANDARD PLAN #505

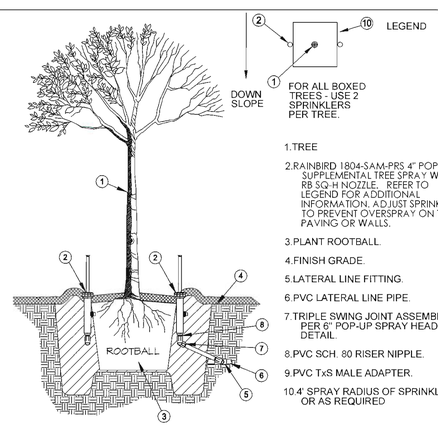


LEGEND

1. LIGHT POLE LOCATED WITHIN THE MEDIAN ISLAND NOSE.
2. LANDSCAPE MULCH PER LANDSCAPE PLAN..
3. NETAFIM TLS6 DRIPPERLINE.
4. CURB AND GUTTER.
5. ROADWAY.
6. 4" PVC SCHEDULE 40 PIPE SLEEVE WITH IRRIGATION MAINLINE PIPING.
7. 4"PVC CONTROL WIRE CONDUIT. 42" DEEP MINIMUM. TRENCH REPAIR PER CITY STD. PLAN 223
8. LIGHT POLE FOUNDATION FOOTING. VERIFY DIMENSIONS IN FIELD.

G SCHEMATIC PIPING LAYOUT AT LIGHT POLE

SCALE: N.T.S. LOCATED WITHIN MEDIAN ISLAND NOSE



1. TREE
2. RAINBIRD 1804-SAM-PRS 4" POP-UP SUPPLEMENTAL TREE SPRAY WITH RB SQ-H NOZZLE. REFER TO LEGEND FOR ADDITIONAL INFORMATION. ADJUST SPRINKLER TO PREVENT OVERSPRAY ON TO PAVING OR WALLS.
3. PLANT ROOTBALL.
4. FINISH GRADE.
5. LATERAL LINE FITTING.
6. PVC LATERAL LINE PIPE.
7. TRIPLE SWING JOINT ASSEMBLY PER 6" POP-UP SPRAY HEAD DETAIL.
8. PVC SCH. 80 RISER NIPPLE.
9. PVC TxS MALE ADAPTER.
10. 4' SPRAY RADIUS OF SPRINKLER OR AS REQUIRED

H TREE IRRIGATION IN LANDSCAPE

SCALE: N.T.S. USING POP-UP SPRINKLERS

NOTE:
- REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARDS PLAN DETAILS

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #:_____

ONSITE APPROVAL: _____ DATE:_____

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY 2214 Date 5/31/2018 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

DRAWN BY: CV	DATE AUG 2016	
DESIGNED BY: AG	DATE AUG 2016	
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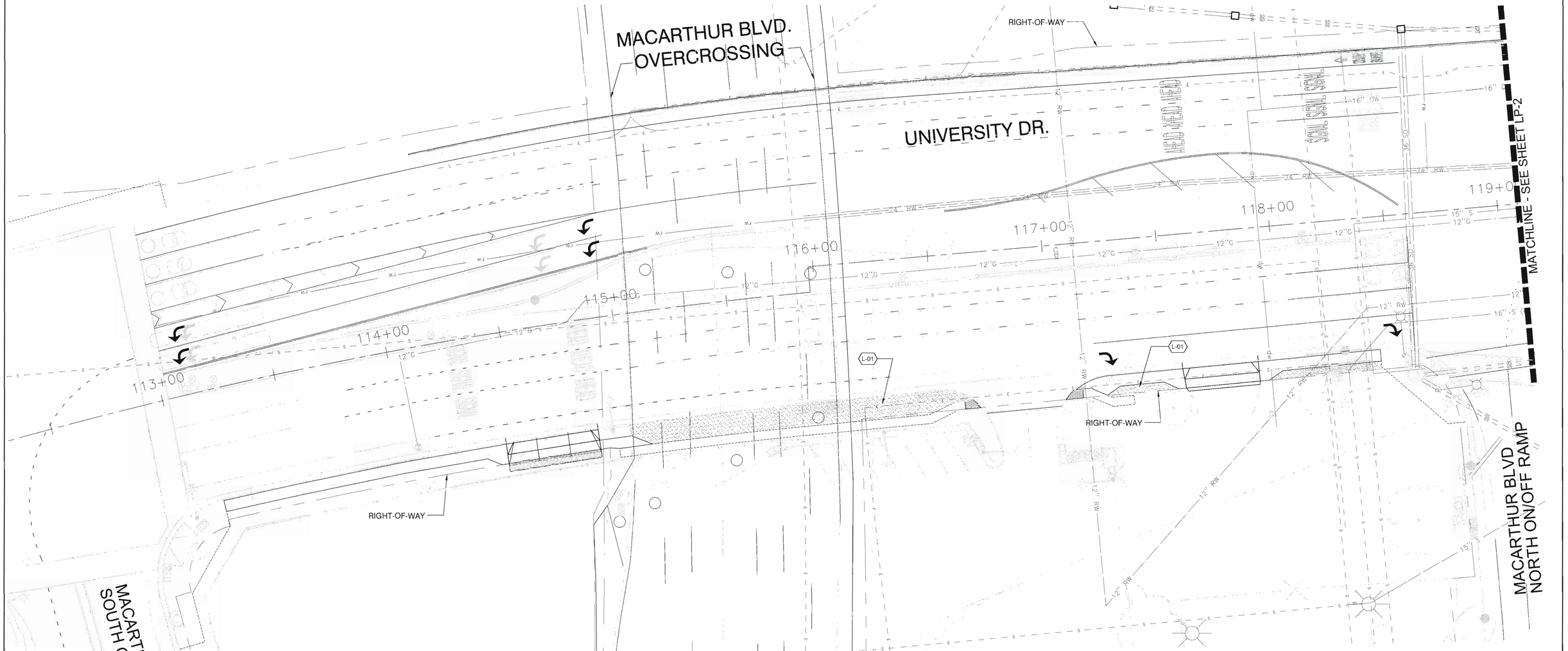
IRWD CODE 6788 | C.I.P. NO. 311306

UNIVERSITY DRIVE WIDENING
LANDSCAPE IRRIGATION DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LI-14

SHEET 59 OF 87



REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

NOTE:
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- FOR PLANTING DETAILS, REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARDS PLAN DETAILS

DIGALERT
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY — 2214 — Signature — Exp. Date 5/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
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Landscape Architecture Planning Urban Design
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7.10.17
ARTHUR D. GUY RLA #2214 DATE

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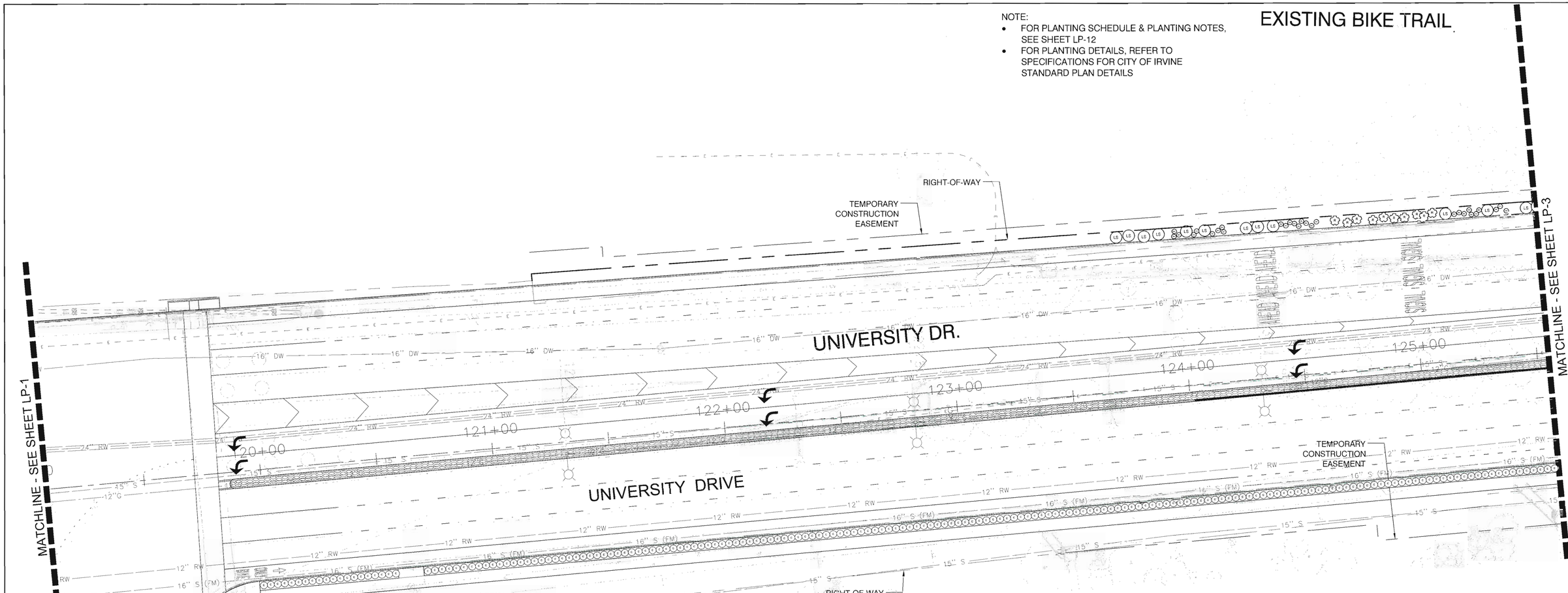
UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LP-1
SHEET 60 OF 87

NOTE:
- FOR PLANTING SCHEDULE & PLANTING NOTES, SEE SHEET LP-12
- FOR PLANTING DETAILS, REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARD PLAN DETAILS



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
	EUCALYPTUS PAPUANA	GHOST GUM	24"BOX	LOW	79	STD.-606
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX STD	VERY LOW	23	STD.-606
SHRUBS	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**WUCOLS**	**QTY**	**DETAIL**
D	ACACIA REDOLENS 'DESERT CARPET' TM	BANK CATCLAW	1 GAL	VERY LOW	608	STD.-601
AA	AGAVE AMERICANA	CENTURY PLANT	15 GAL	LOW	19	STD.-601
C	CALLISTEMON VIMINALIS 'BETTER JOHN'	DWARF WEEPING BOTTLE BRUSH	5 GAL	LOW	783	STD.-601
	ELAEAGNUS PUNGENS	THORNY ELEAGNUS	5 GAL	LOW	55	STD.-601
EN	ENCELIA CALIFORNICA	CALIFORNIA ENCELIA	1 GAL	VERY LOW	165	STD.-601
EA	EXISTING AGAVE AMERICANA		PROTECT IN PLACE		14	
LS	LOTUS SCOPARIUS	CALIFORNIA DEER WEED	5 GAL	VERY LOW	67	STD.-601
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	2,233	STD.-601
R	RHUS OVATA	SUGAR BUSH	5 GAL	VERY LOW	55	STD.-601

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY	DETAIL
	ACACIA REDOLENS `DESERT CARPET` TM	BANK CATCLAW	1 GAL	VERY LOW	60" o.c.	303	STD.-609
	CAREX BUCHANANII	LEATHER LEAF SEDGE	1 GAL	MEDIUM	24" o.c.	1,164	STD.-609
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	12" o.c.	16,694	STD.-609
	CAREX PRAEGRACILIS	SLENDER SEDGE	TUFFY PLUGS	MEDIUM	12" o.c.	6,571	STD.-609
	EXISTING LANTANA SPP.		PROTECT IN PLACE			140 SF	
	LANTANA X `NEW GOLD`	NEW GOLD LANTANA	1 GAL	VERY LOW	36" o.c.	27	STD.-609
	LOMANDRA LONGIFOLIA `BREEZE`	DWARF MAT RUSH	1 GAL	LOW	36" o.c.	594	STD.-609
	LONICERA JAPONICA `HALLIANA`/ VINCA MAJOR 50/50 MIX	HALLS HONEYSUCKLE/ PERIWINKLE	FLATTED	LOW	12" o.c.	7,434	STD.-609
	PYRACANTHA KOIDZUMII `SANTA CRUZ`	SANTA CRUZ PYRACANTHA	5 GAL	LOW	60" o.c.	87	STD.-609

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D. GUY — No. 2214 — REN. 8/31/2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

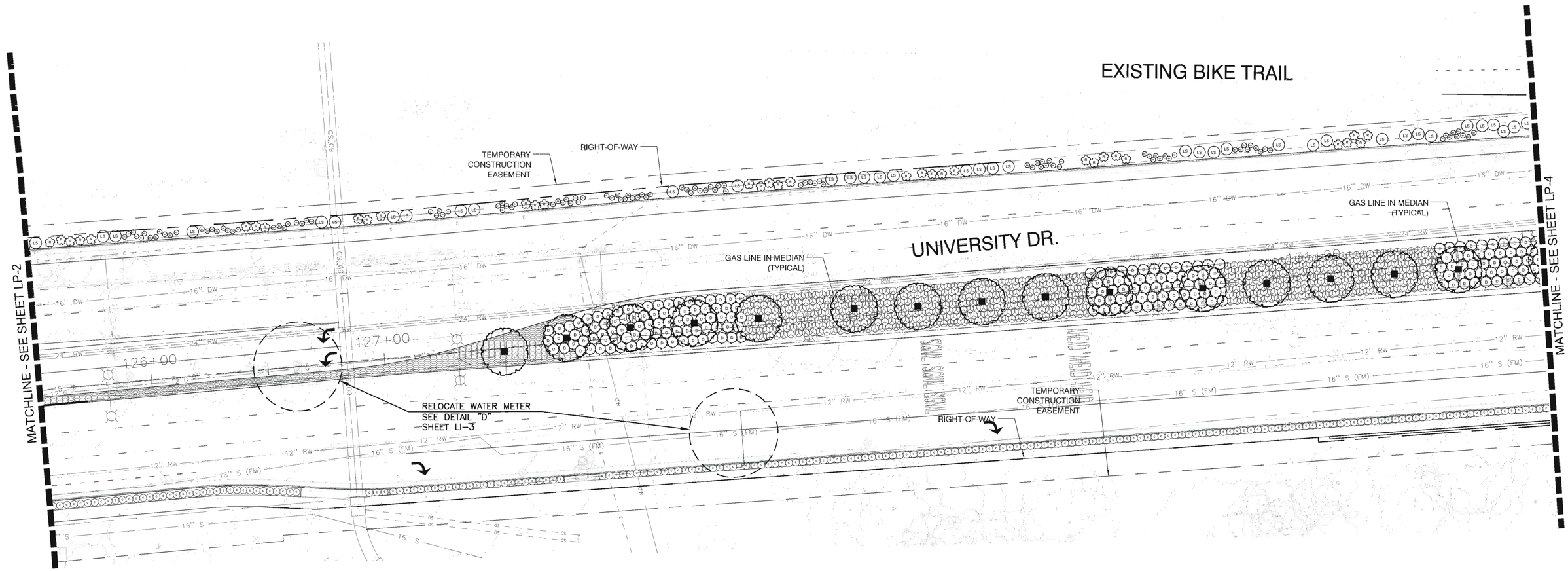
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UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284–EMC

SHEET LP–2
SHEET 61 OF 87



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
	EUCALYPTUS PAPUANA	GHOST GUM	24"BOX	LOW	79	STD.-606
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX STD	VERY LOW	23	STD.-606

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
D	ACACIA REDOLENS 'DESERT CARPET' TM	BANK CATCLAW	1 GAL	VERY LOW	608	STD.-601
AA	AGAVE AMERICANA	CENTURY PLANT	15 GAL	LOW	19	STD.-601
C	CALLISTEMON VIMINALIS 'BETTER JOHN'	DWARF WEEPING BOTTLE BRUSH	5 GAL	LOW	783	STD.-601
	ELAEAGNUS PUNGENS	THORNY ELEAGNUS	5 GAL	LOW	55	STD.-601
EN	ENCELIA CALIFORNICA	CALIFORNIA ENCELIA	1 GAL	VERY LOW	165	STD.-601
	EXISTING AGAVE AMERICANA		PROTECT IN PLACE		14	
LS	LOTUS SCOPARIUS	CALIFORNIA DEER WEED	5 GAL	VERY LOW	67	STD.-601
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	2,233	STD.-601
R	RHUS OVATA	SUGAR BUSH	5 GAL	VERY LOW	55	STD.-601

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY	DETAIL
	ACACIA REDOLENS `DESERT CARPET` TM	BANK CATCLAW	1 GAL	VERY LOW	60" o.c.	303	STD.-609
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	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	12" o.c.	16,694	STD.-609
	CAREX PRAEGRACILIS	SLENDER SEDGE	TUFFY PLUGS	MEDIUM	12" o.c.	6,571	STD.-609
	EXISTING LANTANA SPP.		PROTECT IN PLACE			140 SF	
	LANTANA X `NEW GOLD`	NEW GOLD LANTANA	1 GAL	VERY LOW	36" o.c.	27	STD.-609
	LOMANDRA LONGIFOLIA `BREEZE`	DWARF MAT RUSH	1 GAL	LOW	36" o.c.	594	STD.-609
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NOTE:
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0 20 40 60 feet
SCALE: 1" = 20'

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NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY 2214 Date 3/31/2018 STATE OF CALIFORNIA

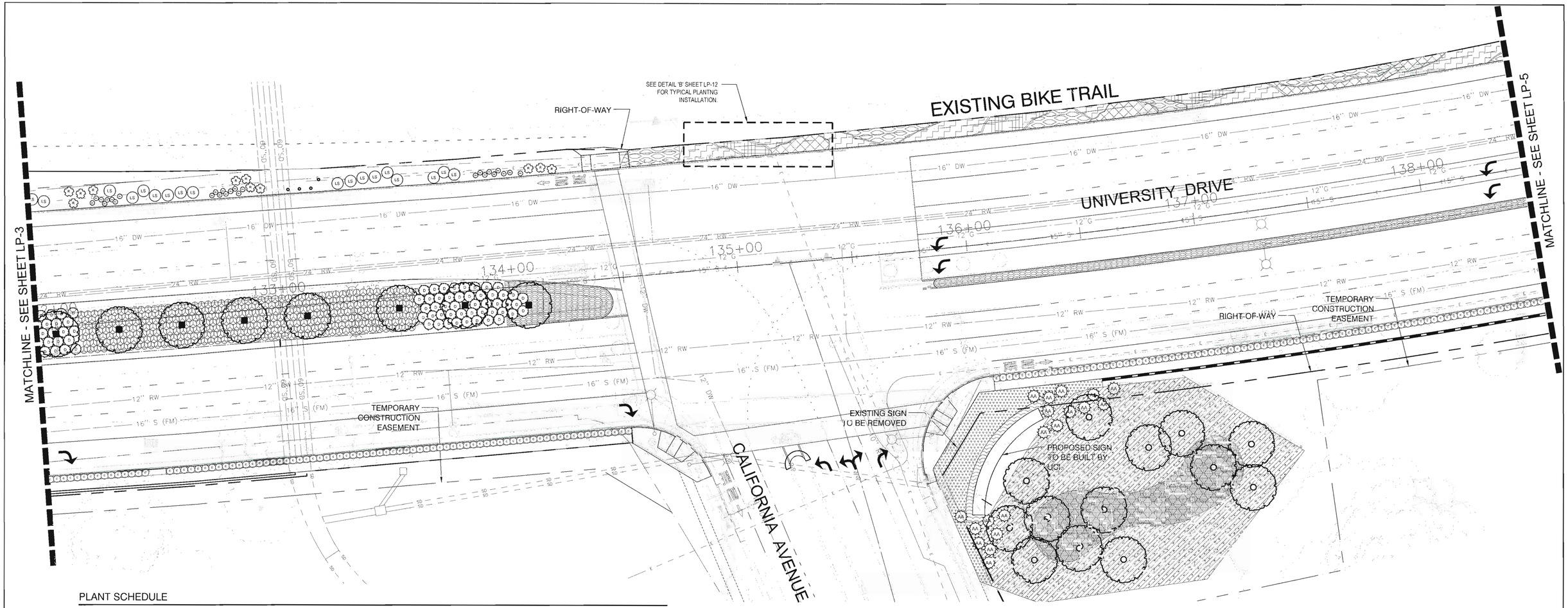
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ARTHUR D. GUY RLA #2214 7.10.17 DATE

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CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LP-3 SHEET 62 OF 87



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
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REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY 2214 RENEWAL 08/31/2018 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

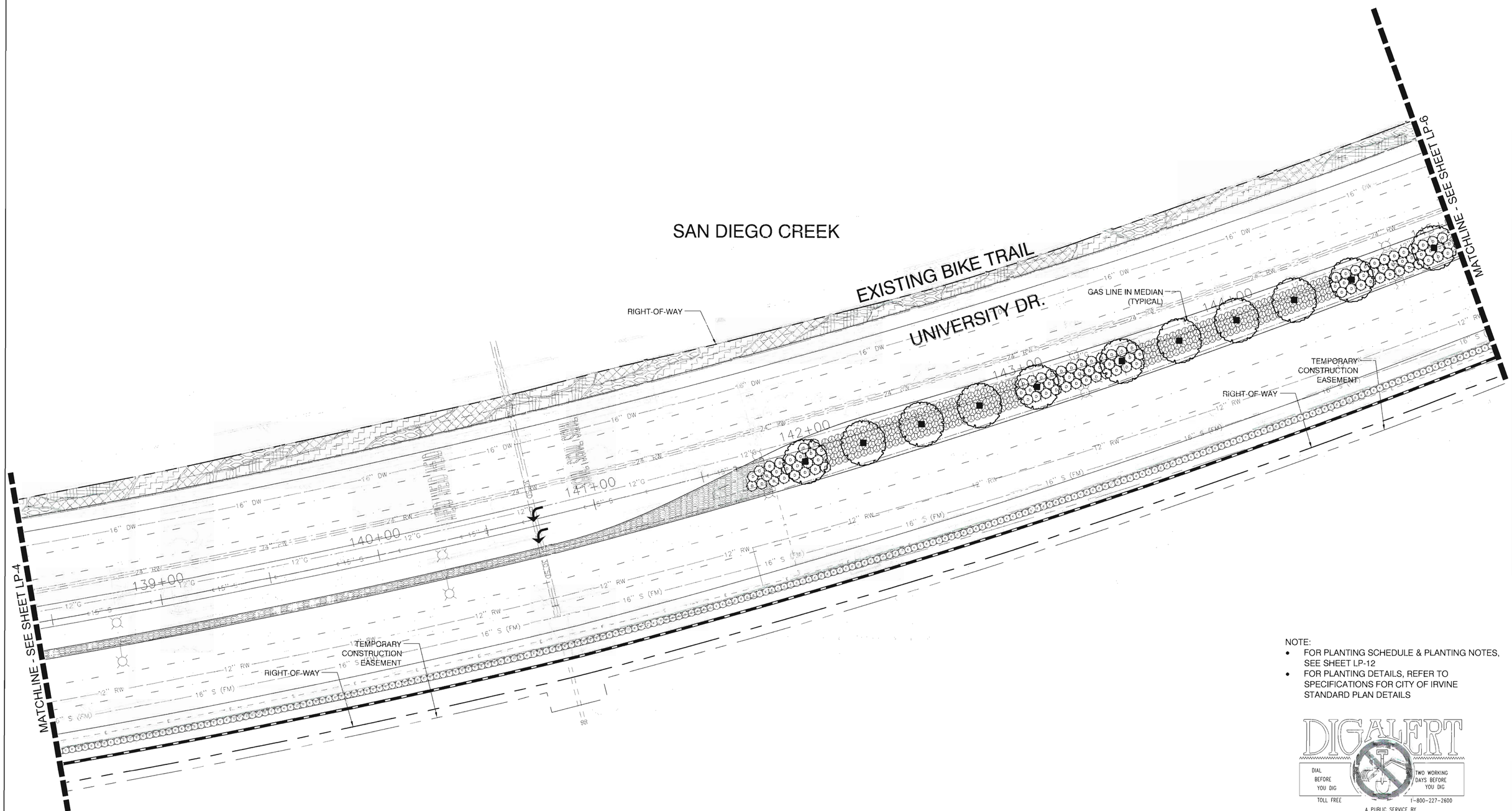
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DESIGNED BY:	AG	AUG 2016
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RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LP-4 SHEET 63 OF 87



NOTE:

- FOR PLANTING SCHEDULE & PLANTING NOTES, SEE SHEET LP-12
- FOR PLANTING DETAILS, REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARD PLAN DETAILS

DIGALERT
DIAL BEFORE YOU DIG
TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet
SCALE: 1" = 20'

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REGISTERED LANDSCAPE ARCHITECT ARTHUR D. GUY 111 Exp. 5/31/2018 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com
ARTHUR D. GUY RLA #2214 DATE

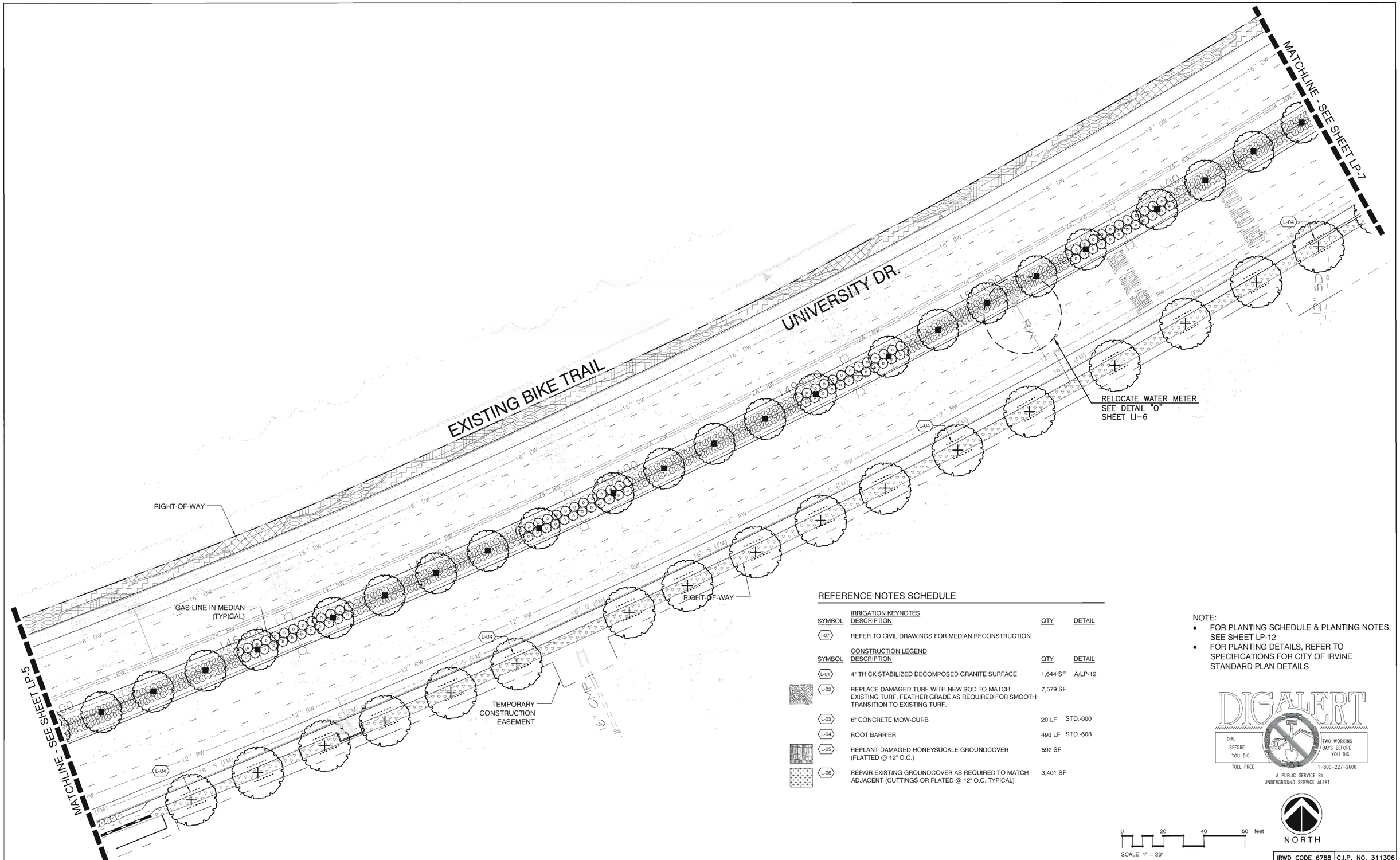
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RECOMMENDED BY:	DATE	

UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LP-5
SHEET 64 OF 87



REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

NOTE:
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REGISTERED LANDSCAPE ARCHITECT ARTHUR D. GUY 2214 STATE OF CALIFORNIA

PLAN PREPARED BY:
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3185 C Airway Avenue Costa Mesa, CA 92626
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ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

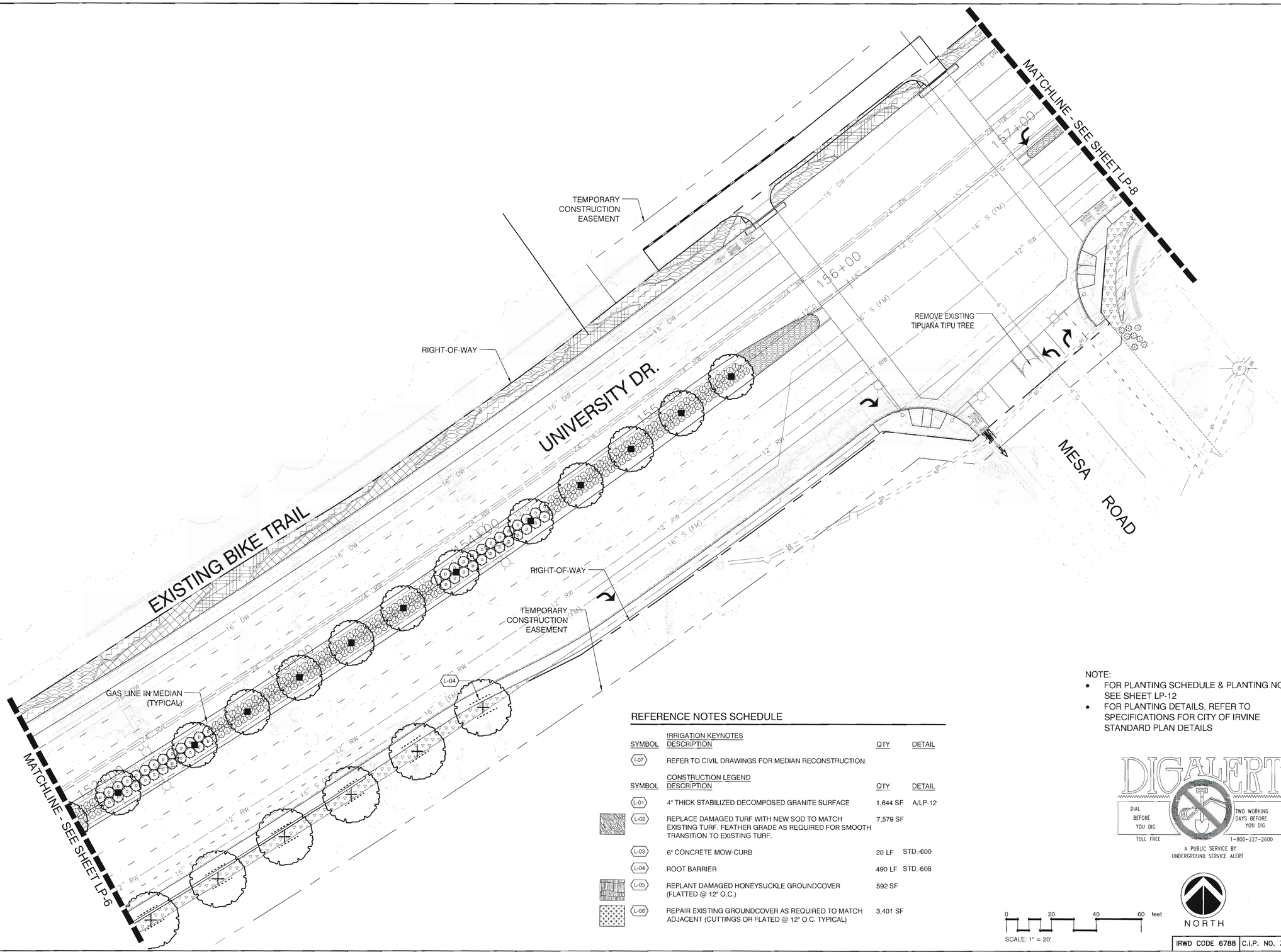
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UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LP-6
SHEET 65 OF 87



REFERENCE NOTES SCHEDULE

IRRIGATION KEYNOTES

SYMBOL	DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

NOTE:
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REGISTERED LANDSCAPE ARCHITECT — ARTHUR D GUY III — No. 2214 — Exp. 8-31-2018 — STATE OF CALIFORNIA

PLAN PREPARED BY:
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Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
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ARTHUR D. GUY RLA #2214 — 7.10.17 DATE

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UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284–EMC

SHEET LP–7
SHEET 66 OF 87

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
	EUCALYPTUS PAPUANA	GHOST GUM	24"BOX	LOW	79	STD.-606
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX STD	VERY LOW	23	STD.-606

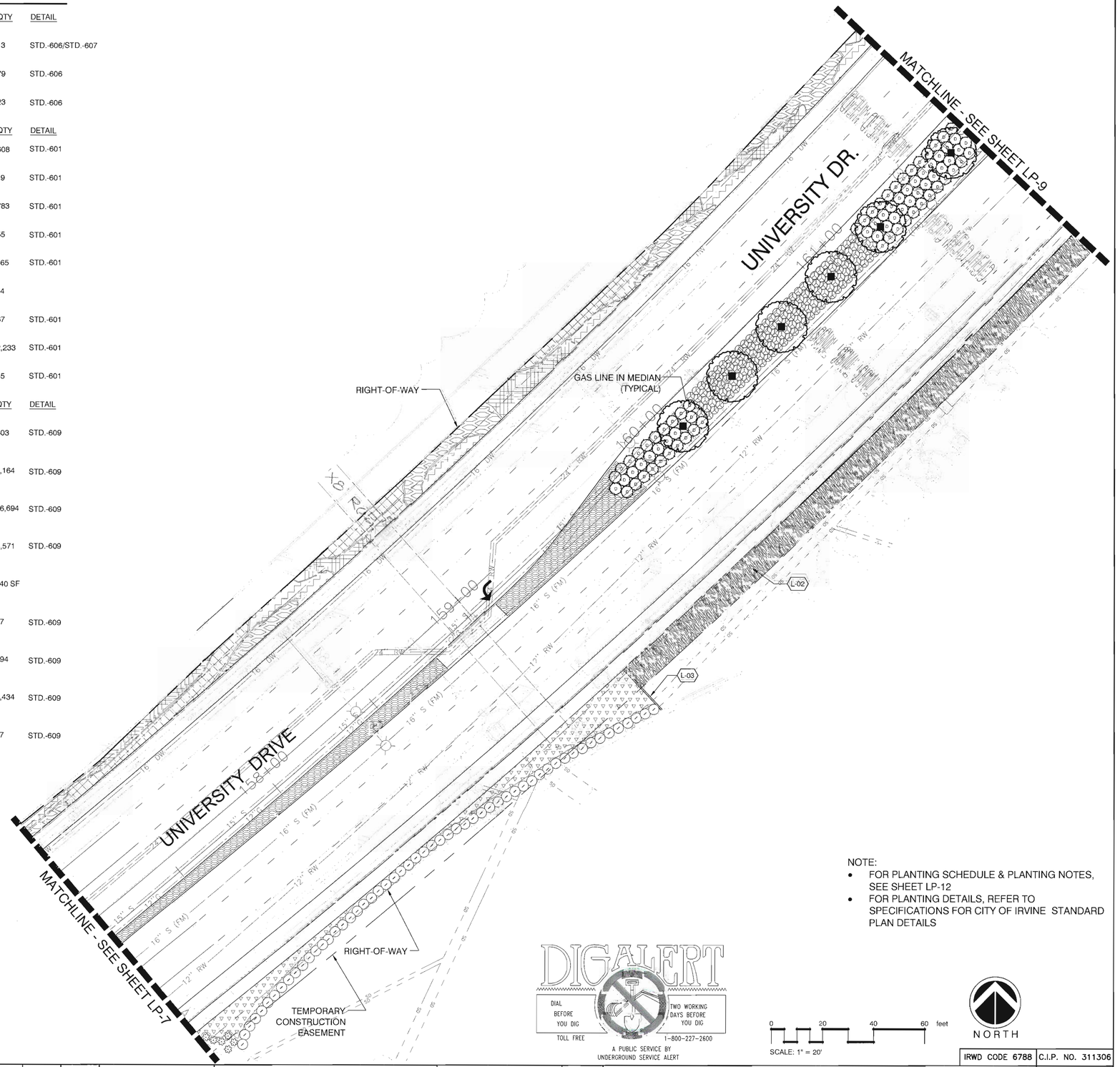
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
D	ACACIA REDOLENS 'DESERT CARPET' TM	BANK CATCLAW	1 GAL	VERY LOW	608	STD.-601
AA	AGAVE AMERICANA	CENTURY PLANT	15 GAL	LOW	19	STD.-601
C	CALLISTEMON VIMINALIS 'BETTER JOHN'	DWARF WEEPING BOTTLE BRUSH	5 GAL	LOW	783	STD.-601
	ELAEAGNUS PUNGENS	THORNY ELEAGNUS	5 GAL	LOW	55	STD.-601
EN	ENCELIA CALIFORNICA	CALIFORNIA ENCELIA	1 GAL	VERY LOW	165	STD.-601
A	EXISTING AGAVE AMERICANA		PROTECT IN PLACE		14	
LS	LOTUS SCOPARIUS	CALIFORNIA DEER WEED	5 GAL	VERY LOW	67	STD.-601
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	2,233	STD.-601
R	RHUS OVATA	SUGAR BUSH	5 GAL	VERY LOW	55	STD.-601

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY	DETAIL
	ACACIA REDOLENS `DESERT CARPET` TM	BANK CATCLAW	1 GAL	VERY LOW	60" o.c.	303	STD.-609
	CAREX BUCHANANII	LEATHER LEAF SEDGE	1 GAL	MEDIUM	24" o.c.	1,164	STD.-609
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	12" o.c.	16,694	STD.-609
	CAREX PRAEGRACILIS	SLENDER SEDGE	TUFFY PLUGS	MEDIUM	12" o.c.	6,571	STD.-609
	EXISTING LANTANA SPP.		PROTECT IN PLACE			140 SF	
	LANTANA X `NEW GOLD`	NEW GOLD LANTANA	1 GAL	VERY LOW	36" o.c.	27	STD.-609
	LOMANDRA LONGIFOLIA `BREEZE`	DWARF MAT RUSH	1 GAL	LOW	36" o.c.	594	STD.-609
	LONICERA JAPONICA `HALLIANA`/ VINCA MAJOR 50/50 MIX	HALLS HONEYSUCKLE/ PERIWINKLE	FLATTED	LOW	12" o.c.	7,434	STD.-609
	PYRACANTHA KOIDZUMII `SANTA CRUZ`	SANTA CRUZ PYRACANTHA	5 GAL	LOW	60" o.c.	87	STD.-609

REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	



NOTE:
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DIGALERT
DIAL BEFORE YOU DIG TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG 1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

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REGISTERED LANDSCAPE ARCHITECT ARTHUR D. GUY III 2214 Date 5/31/18 STATE OF CALIFORNIA

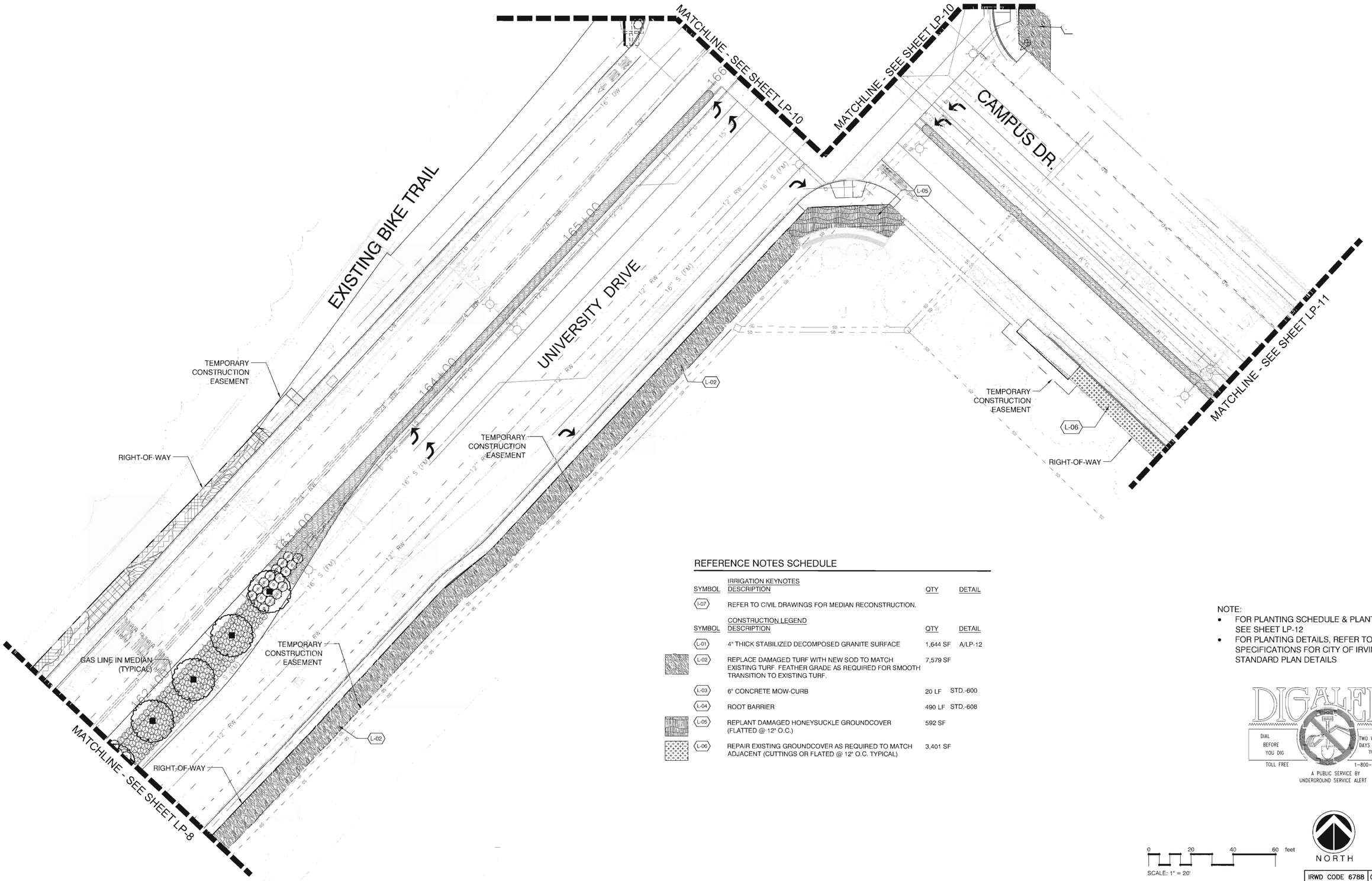
PLAN PREPARED BY:
BGB DESIGN GROUP
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3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com
ARTHUR D. GUY RLA #2214 7.10.17 DATE

DRAWN BY: CV	DATE	AUG 2016
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RECOMMENDED BY:	DATE	

UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET LP-8
SHEET 67 OF 87



REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

NOTE:
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED LANDSCAPE ARCHITECT ARTHUR D GUY III No. 2214 Signature Date 6/31/18 STATE OF CALIFORNIA

PLAN PREPARED BY:
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Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com

ARTHUR D. GUY RLA #2214 7.10.17 DATE

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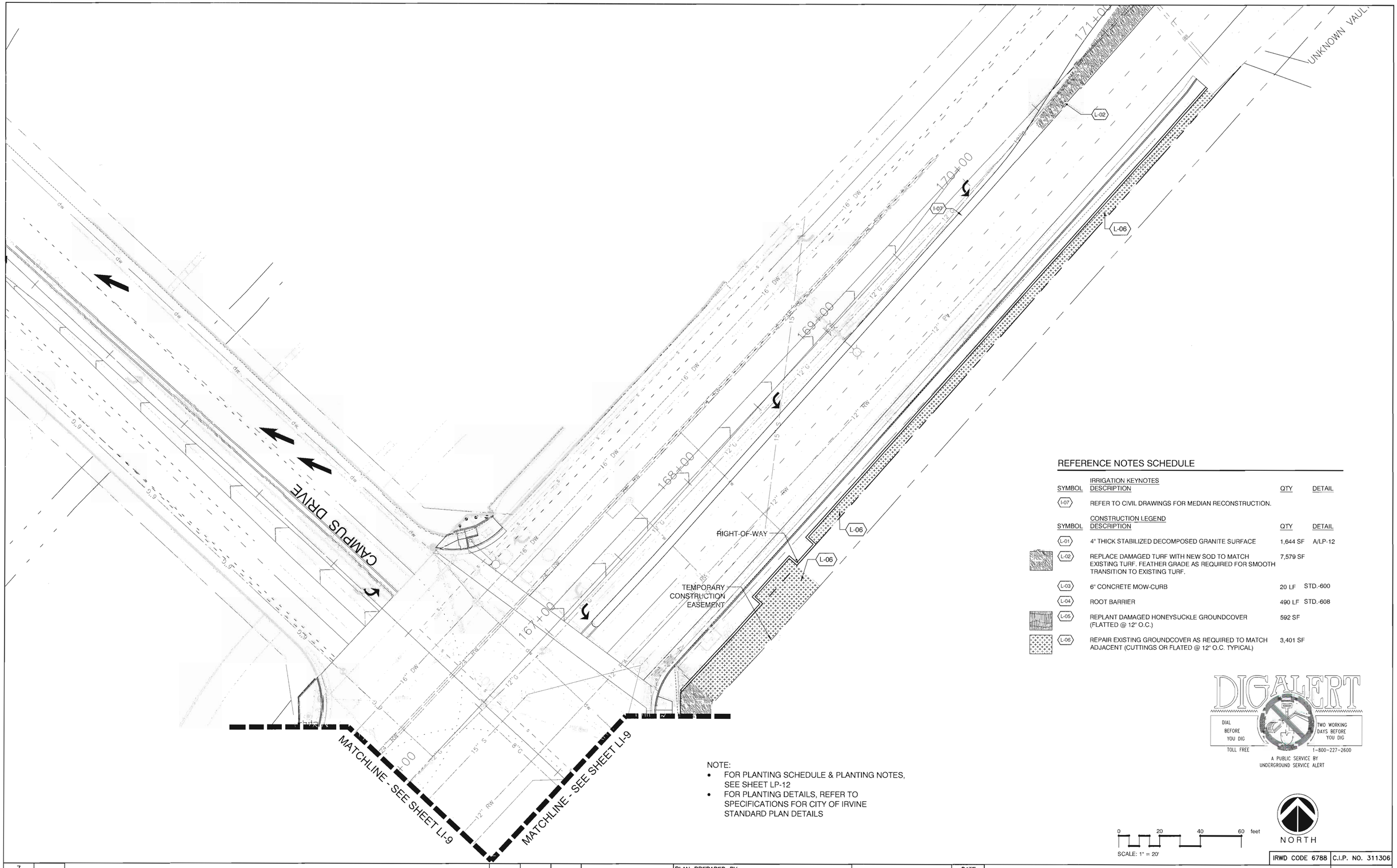
UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284–EMC

SHEET LP–9

SHEET 68 OF 87



NOTE:

- FOR PLANTING SCHEDULE & PLANTING NOTES, SEE SHEET LP-12
- FOR PLANTING DETAILS, REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARD PLAN DETAILS

REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

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REGISTERED LANDSCAPE ARCHITECT ARTHUR D. GUY 2214 Signature 7-12-17 Date STATE OF CALIFORNIA

PLAN PREPARED BY:
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Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2898 F: 714-545-2878 bgb-inc.com
ARTHUR D. GUY RLA #2214 7.12.17 DATE

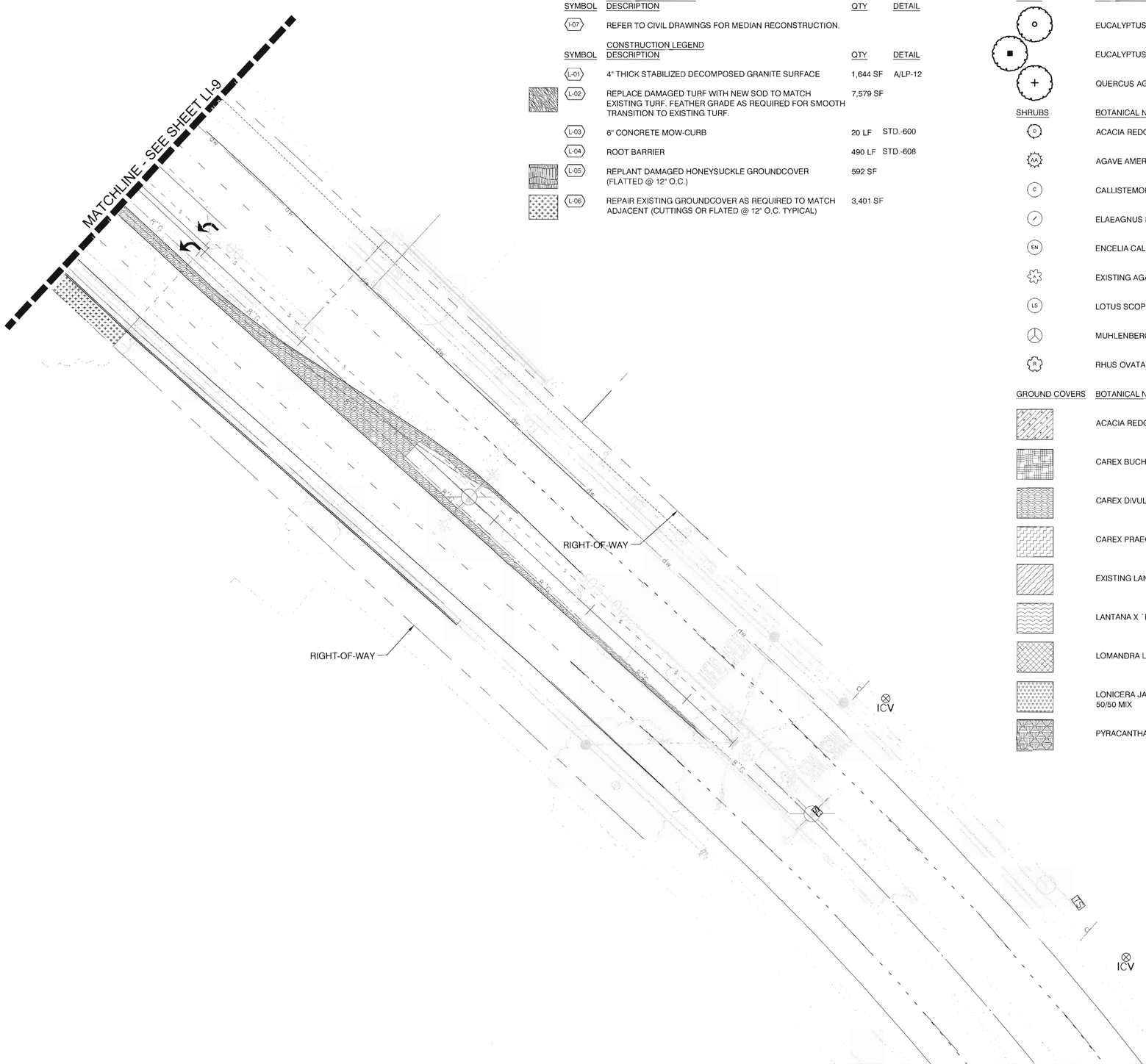
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UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING PLAN
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET LP-10
SHEET 69 OF 87



REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
	EUCALYPTUS PAPUANA	GHOST GUM	24"BOX	LOW	79	STD.-606
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX STD	VERY LOW	23	STD.-606

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
D	ACACIA REDOLENS 'DESERT CARPET' TM	BANK CATCLAW	1 GAL	VERY LOW	608	STD.-601
AA	AGAVE AMERICANA	CENTURY PLANT	15 GAL	LOW	19	STD.-601
C	CALLISTEMON VIMINALIS 'BETTER JOHN'	DWARF WEEPING BOTTLE BRUSH	5 GAL	LOW	783	STD.-601
/	ELAEAGNUS PUNGENS	THORNY ELEAGNUS	5 GAL	LOW	55	STD.-601
EN	ENCELIA CALIFORNICA	CALIFORNIA ENCELIA	1 GAL	VERY LOW	165	STD.-601
A	EXISTING AGAVE AMERICANA		PROTECT IN PLACE		14	
LS	LOTUS SCOPARIUS	CALIFORNIA DEER WEED	5 GAL	VERY LOW	67	STD.-601
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	2,233	STD.-601
R	RHUS OVATA	SUGAR BUSH	5 GAL	VERY LOW	55	STD.-601

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY	DETAIL
	ACACIA REDOLENS `DESERT CARPET` TM	BANK CATCLAW	1 GAL	VERY LOW	60" o.c.	303	STD.-609
	CAREX BUCHANANII	LEATHER LEAF SEDGE	1 GAL	MEDIUM	24" o.c.	1,164	STD.-609
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	12" o.c.	16,694	STD.-609
	CAREX PRAEGRACILIS	SLENDER SEDGE	TUFFY PLUGS	MEDIUM	12" o.c.	6,571	STD.-609
	EXISTING LANTANA SPP.		PROTECT IN PLACE			140 SF	
	LANTANA X `NEW GOLD`	NEW GOLD LANTANA	1 GAL	VERY LOW	36" o.c.	27	STD.-609
	LOMANDRA LONGIFOLIA `BREEZE`	DWARF MAT RUSH	1 GAL	LOW	36" o.c.	594	STD.-609
	LONICERA JAPONICA `HALLIANA`/ VINCA MAJOR 50/50 MIX	HALLS HONEYSUCKLE/ PERIWINKLE	FLATTED	LOW	12" o.c.	7,434	STD.-609
	PYRACANTHA KOIDZUMII `SANTA CRUZ`	SANTA CRUZ PYRACANTHA	5 GAL	LOW	60" o.c.	87	STD.-609

NOTE:
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PUBLIC WORKS DEPARTMENT

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PLAN CHECK NO. 00663284-EMC

SHEET LP-11

SHEET 70 OF 87

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
○	EUCALYPTUS MACULATA	SPOTTED GUM	24"BOX	LOW	13	STD.-606/STD.-607
■	EUCALYPTUS PAPUANA	GHOST GUM	24"BOX	LOW	79	STD.-606
+	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX STD	VERY LOW	23	STD.-606

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY	DETAIL
D	ACACIA REDOLENS 'DESERT CARPET' TM	BANK CATCLAW	1 GAL	VERY LOW	608	STD.-601
AA	AGAVE AMERICANA	CENTURY PLANT	15 GAL	LOW	19	STD.-601
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/	ELAEAGNUS PUNGENS	THORNY ELEAGNUS	5 GAL	LOW	55	STD.-601
EN	ENCELIA CALIFORNICA	CALIFORNIA ENCELIA	1 GAL	VERY LOW	165	STD.-601
✲	EXISTING AGAVE AMERICANA		PROTECT IN PLACE		14	
LS	LOTUS SCOPARIUS	CALIFORNIA DEER WEED	5 GAL	VERY LOW	67	STD.-601
⅄	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	2,233	STD.-601
R	RHUS OVATA	SUGAR BUSH	5 GAL	VERY LOW	55	STD.-601

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY	DETAIL
	ACACIA REDOLENS `DESERT CARPET` TM	BANK CATCLAW	1 GAL	VERY LOW	60" o.c.	303	STD.-609
	CAREX BUCHANANII	LEATHER LEAF SEDGE	1 GAL	MEDIUM	24" o.c.	1,164	STD.-609
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	LOW	12" o.c.	16,694	STD.-609
	CAREX PRAEGRACILIS	SLENDER SEDGE	TUFFY PLUGS	MEDIUM	12" o.c.	6,571	STD.-609
	EXISTING LANTANA SPP.		PROTECT IN PLACE			140 SF	
	LANTANA X `NEW GOLD`	NEW GOLD LANTANA	1 GAL	VERY LOW	36" o.c.	27	STD.-609
	LOMANDRA LONGIFOLIA `BREEZE`	DWARF MAT RUSH	1 GAL	LOW	36" o.c.	594	STD.-609
	LONICERA JAPONICA `HALLIANA`/ VINCA MAJOR 50/50 MIX	HALLS HONEYSUCKLE/ PERIWINKLE	FLATTED	LOW	12" o.c.	7,434	STD.-609
	PYRACANTHA KOIDZUMII `SANTA CRUZ`	SANTA CRUZ PYRACANTHA	5 GAL	LOW	60" o.c.	87	STD.-609

PLANTING NOTE:
KEEP THE FOLLOWING PLANTED CLEARANCES FROM CURB OR SIDEWALK:
- ACACIA 'DESERT CARPET' - 4'-0"
- MUHLENBERGIA RIGENS - 4'-0"
- CAREX SPP. - 2'-0"

NOTE:
- REFER TO SPECIFICATIONS FOR CITY OF IRVINE STANDARDS PLAN DETAILS

DIGALERT
DIAL BEFORE YOU DIG TOLL FREE 1-800-227-2600 — TWO WORKING DAYS BEFORE YOU DIG
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

GENERAL PLANTING NOTES:
1. INSTALL 2" DEEP MINIMUM 'FOREST FLOOR' MULCH AS TOPDRESSING IN ALL PLANTER AREAS AT INITIAL PLANT INSTALLATION. YEARLY REPLENISHMENT SHALL OCCUR AS NOTED IN THE MAINTENANCE SPECIFICATIONS. MULCH SHALL BE CONTINUOUSLY MAINTAINED AND REPLACED AS NECESSARY.
2. SOIL AMENDMENTS SHALL BE USED FOR INCREASED SOIL PENETRATION AND PLANT HEALTH. SOIL AMENDMENTS AND QUANTITIES SHALL BE BASED ON FINAL HORTICULTURAL SOILS ANALYSIS THROUGH A QUALIFIED AGRICULTURAL LABORATORY. SEE SPECIFICATIONS, FOR GENERAL PURPOSE SPECIFICATION. A MINIMUM OF 2 CUBIC YARDS OF SOIL AMENDMENT SHALL BE USED PER 1000 SQUARE FEET OF PLANTER AREA. SUCH AMENDMENT SHALL BE TILLED TO A 6" DEPTH.
3. TREE SYMBOLS SHOWN ON PLAN SHALL BE CONSIDERED DIAGRAMMATIC. ALL APPLICABLE CITY SPECIFICATIONS AND STANDARDS SHALL BE ADHERED TO AND REVIEWED PRIOR TO PLANTING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS PROTECTION OF ALL PLANT MATERIALS ON-SITE. THE PLACEMENT OF ALL TREES, SHRUBS AND GROUNDCOVERS SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. ANY TREE OR SHRUB THAT IS PLANTED WITHOUT PRIOR REVIEW IS SUBJECT TO REMOVAL AND RELOCATION IF DEEMED NECESSARY. ALL PLANT MATERIAL SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY LANDSCAPE ARCHITECT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECT PLANT HEIGHTS ABOVE GRADE.
6. ALL SPECIMEN TREES ARE TO BE PRUNED AFTER PLANTING BY LANDSCAPE CONTRACTOR.
7. ALL PLANTS SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA NURSERY ASSOCIATION WITH REGARD TO SIZE AND CONDITION.

TREE PLANTING NOTES:
1. ALL TREES SHALL BE STAKED / GUYED PER APPROVED LANDSCAPE STANDARD DETAILS. REFER TO CITY STANDARD DETAILS.
2. CONTRACTOR SHALL LOCATE ALL STORM DRAIN AND UTILITY LINES IN FIELD PRIOR TO THE INSTALLATION OF TREES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT WITH TREE LOCATIONS AND STORM DRAIN/UTILITY LINES. ADJUSTMENTS WILL BE MADE ACCORDINGLY.

ROOT BARRIER NOTE:
ALL TREES PLANTED WITHIN 5'-0" OF HARDSCAPE AREAS (I.E. SIDEWALKS) SHALL BE PLANTED WITH ROOT BARRIER. BARRIER SHALL EXTEND A MINIMUM OF 5'-0" ON EACH SIDE OF TRUNK. PROVIDE 24" DEEP ROOT BARRIER ADJACENT TO PAVING. PROVIDE 24" DEEP ROOT BARRIER ADJACENT TO CURB. SEE PLANTING DETAIL SHEET FOR ROOT BARRIER DETAIL.

REFERENCE NOTES:
1. SEE PLANTING DETAIL SHEET FOR PLANTING DETAILS & NOTES
2. SEE SPECIFICATIONS FOR PLANTING REQUIREMENTS
3. ALL IMPROVEMENTS TO BE MAINTAINED BY PROPERTY OWNER.

PLANT QUANTITIES:
CONTRACTOR SHALL NOTE THAT THE QUANTITIES ON PLANT LEGEND HAVE BEEN PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE HIS OWN QUANTITIES FOR BID PREPARATION. ANY DISCREPANCIES IN PLANT QUANTITIES AND SIZES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.

PLANT INSTALLATION
1. ALL PLANTS SHALL BE VERIFIED BY LANDSCAPE ARCHITECT BY ON-SITE INSPECTION OR THROUGH PHOTOGRAPHS FROM NURSERY PRIOR TO PLANTING. PLANTS MAY BE SUBJECT TO REPLACEMENT BY THE DISCRETION OF THE LANDSCAPE ARCHITECT.
2. PRIOR TO PLANTING, PLANTS SHALL BE LOCATED ABOVE GRADE ON SITE IN THEIR CONTAINERS IN THE LOCATION OF FINAL PLANTING PER THE APPROVED PLANTING PLAN.
3. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED WITHIN 48 HOURS TO INSPECT THE FINAL LOCATIONS FOR ALL PLANT MATERIAL .

TREE DEMOLITION
1. REFER TO ARBORIST REPORT AND TREE INVENTORY BY ARBOR GATE CONSULTING (MARCH 22, 2016) FOR ALL TREE REMOVALS UNLESS OTHERWISE NOTED ON PLAN.

CALIFORNIA COASTAL DEVELOPMENT PERMIT GRANTED BASED UPON CONTRACTOR / AGENCY COMPLIANCE OF THE FOLLOWING SPECIAL CONDITIONS:

1) AN APPROPRIATELY TRAINED BIOLOGIST SHALL MONITOR THE PROPOSED DEVELOPMENT FOR DISTURBANCE TO SENSITIVE SPECIES OR HABITAT AREA. MONITORING SHALL OCCUR AT A MINIMUM ONCE A WEEK DURING ANY WEEK IN WHICH CONSTRUCTION OCCURS. DAILY MONITORING SHALL OCCUR DURING DEVELOPMENT WHICH COULD SIGNIFICANTLY IMPACT BIOLOGICAL RESOURCES SUCH AS GRADING OR CONSTRUCTION THAT COULD RESULT IN DISTURBANCES TO SPECIAL STATUS SPECIES, INCLUDING THE LEAST BELL'S VIREO AND THE YELLOW-BREASTED CHAT. BASED ON FIELD OBSERVATIONS, THE BIOLOGIST SHALL ADVISE THE APPLICANT REGARDING METHODS TO MINIMIZE OR AVOID SIGNIFICANT IMPACTS, WHICH COULD OCCUR UPON SENSITIVE SPECIES OR HABITAT AREAS. THE APPLICANT SHALL NOT UNDERTAKE ANY ACTIVITY, WHICH WOULD DISTURB SENSITIVE SPECIES OR HABITAT AREA UNLESS SPECIFICALLY AUTHORIZED AND MITIGATED UNDER THIS COASTAL DEVELOPMENT PERMIT OR UNLESS AN AMENDMENT TO THIS COASTAL DEVELOPMENT PERMIT FOR SUCH DISTURBANCE HAS BEEN OBTAINED FROM THE COASTAL COMMISSION.

2) ALL PLANTINGS SHALL BE MAINTAINED IN GOOD GROWING CONDITIONS THROUGHOUT THE LIFE OF THE PROJECT, AND WHENEVER NECESSARY, SHALL BE REPLACED WITH NEW PLANT MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH THE LANDSCAPE PLANS.

3) WHERE POSSIBLE, LANDSCAPED AREAS ADJACENT TO IDENTIFIED RIPARIAN HABITAT SHALL BE PLANTED AND MAINTAINED FOR HABITAT PROTECTION AND HABITAT ENHANCEMENT. TO MINIMIZE THE NEED FOR IRRIGATION AND MINIMIZE ENCROACHMENT OF NON-NATIVE PLANT SPECIES INTO ADJACENT OR NEARBY NATIVE PLANT AREAS, ALL LANDSCAPING SHALL CONSIST OF NATIVE SPECIES APPROPRIATE TO THE HABITAT TYPE. NATIVE PLANTS SHALL BE FROM LOCAL STOCK WHEREVER POSSIBLE. NO PLANT SPECIES LISTED AS PROBLEMATIC AND/OR INVASIVE BY THE CALIFORNIA NATIVE PLANT SOCIETY (HTTP://WWW.CNPS.ORG/), THE CALIFORNIA INVASIVE PLANT COUNCIL (FORMERLY THE CALIFORNIA EXOTIC PEST PLANT COUNCIL) (HTTP://WWW.CAL-IPC.ORG/), OR AS MAY BE IDENTIFIED FROM TIME TO TIME BY THE STATE OF CALIFORNIA SHALL BE EMPLOYED OR ALLOWED TO NATURALIZE OR PERSIST ON THE SITE. NO PLANT SPECIES LISTED AS A 'NOXIOUS WEED' BY THE STATE OF CALIFORNIA OR THE U.S. FEDERAL GOVERNMENT SHALL BE UTILIZED WITHIN THE PROPERTY. ALL PLANTS SHALL BE LOW WATER USE PLANTS AS IDENTIFIED BY CALIFORNIA DEPARTMENT OF WATER RESOURCES (SEE: HTTP://WWW.OWUE.WATER.CA.GOV/DOCS/WUCOLS00.PDF) WITH THE EXCEPTION OF LIMITED PLANT MATERIAL SPECIES SUBJECT TO PERIODIC INUNDATION AND NOT WITHIN HABITAT AREA.

4) TEMPORARY IRRIGATION IS ALLOWED WITHIN SENSITIVE HABITAT AREA FOR PLANT ESTABLISHMENT. GENERAL EXISTING VEGETATED AREAS ARE SHOW ON LANDSCAPE DRAWINGS. REFER TO CIVIL DRAWINGS FOR TOPOGRAPHY. IN GENERAL, MINOR / IF ANY GRADING SHALL OCCUR PAST THE FINAL R.O.W. NO LANDSCAPE OR IRRIGATION WILL OCCUR NORTHWARD OF THE EXISTING ASPHALT BIKE TRAIL.

5) REFER TO PLANS FOR PROPOSED LANDSCAPE MATERIAL LOCATIONS.

6) SCHEDULED LANDSCAPE INSTALLATION IS SCHEDULED BETWEEN: JANUARY-APRIL 2018.

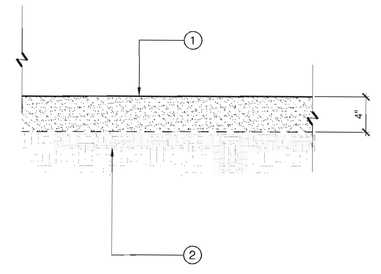
7) THE PERMITTEES SHALL UNDERTAKE DEVELOPMENT IN ACCORDANCE WITH THE APPROVED PLAN. ANY PROPOSED CHANGES TO THE APPROVED FINAL PLAN SHALL BE REPORTED TO THE EXECUTIVE DIRECTOR. NO CHANGES TO THE APPROVED FINAL PLANS SHALL OCCUR WITHOUT A COMMISSION AMENDMENT TO THIS COASTAL DEVELOPMENT PERMIT UNLESS THE EXECUTIVE DIRECTOR DETERMINES THAT NO AMENDMENT IS LEGALLY REQUIRED.

REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION KEYNOTES DESCRIPTION	QTY	DETAIL
I-07	REFER TO CIVIL DRAWINGS FOR MEDIAN RECONSTRUCTION.		

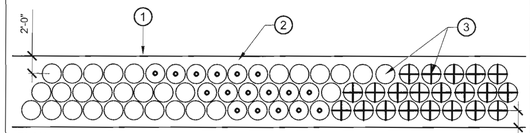
SYMBOL	CONSTRUCTION LEGEND DESCRIPTION	QTY	DETAIL
L-01	4" THICK STABILIZED DECOMPOSED GRANITE SURFACE	1,644 SF	A/LP-12
L-02	REPLACE DAMAGED TURF WITH NEW SOD TO MATCH EXISTING TURF. FEATHER GRADE AS REQUIRED FOR SMOOTH TRANSITION TO EXISTING TURF.	7,579 SF	
L-03	6" CONCRETE MOW-CURB	20 LF	STD.-600
L-04	ROOT BARRIER	490 LF	STD.-608
L-05	REPLANT DAMAGED HONEYSUCKLE GROUNDCOVER (FLATTED @ 12" O.C.)	592 SF	
L-06	REPAIR EXISTING GROUNDCOVER AS REQUIRED TO MATCH ADJACENT (CUTTINGS OR FLATED @ 12" O.C. TYPICAL)	3,401 SF	

1. NEXPAVE TM POLYMER ORGANIC-LOCK TM STABILIZED DECOMPOSED GRANITE PAVING. INSTALL IN (2) 2" LIFTS PER MANUFACTURER GUIDELINES. COLOR: GOLD
2. COMPACTED SUBGRADE 90% MINIMUM



A STABILIZED DECOMPOSED GRANITE
SCALE: N.T.S. VIEW

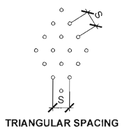
1. LIMIT OF WORK LINE PER PLAN
2. LIMIT OF GROUNDCOVER, TYPICAL. FIRST ROW OF GROUNDCOVER TO BE 2'-0" AWAY FROM EDGE OF CONSTRUCTION FEATURE, LIMIT OF WORK, OR DRIP LINE OF SHRUBS.
3. REFER TO PLANTING PLAN FOR PLANT TYPE & SPACING



PLAN

GROUNDCOVER SHALL BE PLANTED IN THE PLANTING AREAS 2'-0" FROM THE EDGE OF MOWSTRIP OR SIDEWALK TO 1'-6" FROM THE DRIP LINE OF THE FIRST ROW OF SHRUBS IN A ROW MASS ONLY AND 1'-6" TO THE EXISTING WALL OR LIMIT OF WORK LINE.

REFER TO NOTE AT LEFT FOR OTHER PLANT CLEARANCE REQUIREMENT.



TRIANGULAR SPACING

B GROUNDCOVER SPACING
SCALE: N.T.S. SECTION

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED LANDSCAPE ARCHITECT ARTHUR D. GUY TRLA #2214 7.10.17 Date 9/30/18 STATE OF CALIFORNIA

PLAN PREPARED BY:
BGB | DESIGN GROUP
Landscape Architecture Planning Urban Design
3185 C Airway Avenue Costa Mesa, CA 92626
P: 714-545-2896 F: 714-545-2878 bgb-inc.com
ARTHUR D. GUY TRLA #2214 7.10.17 DATE

		DATE
DRAWN BY:	CV	AUG 2016
DESIGNED BY:	AG	AUG 2016
CHECKED BY:	AG	AUG 2016
RECOMMENDED BY:		DATE

UNIVERSITY DRIVE WIDENING
LANDSCAPE PLANTING SCHEDULE & NOTES
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

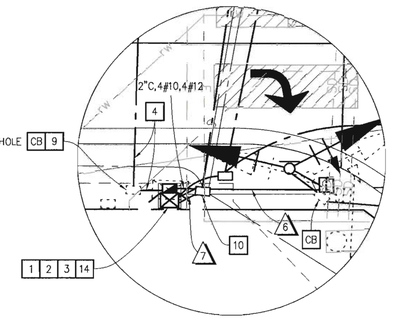
PLAN CHECK NO. 00663284-EMC
SHEET LP-12
SHEET 71 OF 87

CONDUCTOR SCHEDULE

AWG SIZE, WIRE OR CABLE TYPE	STD	PHASES	CONDUIT SIZE AND RUN NUMBER 1	2	3	4	5	6	7
12 WIRE CONDUCTOR CABLE	1	ø1,ø6,ø8	-/-/-	1/-/-	-/-/-	-/-/-	-/-/-	-/-/-	1/-/-
3 WIRE CONDUCTOR CABLE	2	ø8	1/-/-	1/-/-	-/-/-	-/-/-	-/-/-	-/-/-	1/-/-
	3	ø6,ø8P /ø8PPB	1/1/-	1/1/-	-/-/-	-/-/-	-/-/-	-/-/-	1/1/-
	4	ø2,ø2P /ø8PPB	-/-/-	-/-/-	1/1/-	1/1/-	-/-/-	1/1/-	1/1/-
5 WIRE CONDUCTOR CABLE	5	ø8,ø8P /ø2PPB	-/-/-	-/-/-	-/-/-	1/1/-	-/-/-	1/1/-	1/1/-
	6	/ø2PPB	-/-/-	-/-/-	-/-/-	-/-/-	-/1/-	-/1/-	-/1/-
	7	ø1,ø2,ø2P	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	1/-/-	1/-/-
		TOTAL CABLES	2/1/-	3/1/-	1/1/-	2/2/-	-/1/-	3/3/-	6/4/-
TYPE B DLC		ø2 DETECTOR	–	–	–	–	–	–	3
		ø6 DETECTOR	3	3	–	–	–	–	3
		ø8 DETECTOR	–	–	–	2	–	2	2
		TOTAL DLC'S	3	3	–	2	–	2	8
#10		LUMINAIRE	2	2	2	2	2	2	–
#12		IISNS	2	2	2	2	–	2	–
4#20		EVP	–	1	1	1	–	1	2
3-#16		VIDEO POWER CABLE	1	3	1	1	–	1	4
*		VIDEO CABLE	1	3	1	1	–	1	4
CCTV		CAT-5E (SHIELDED)	1	1	–	–	–	–	1
IINTERCONNECT		HYBRID FIBER OPTIC CABLE	–	–	–	–	–	–	1
PERCENT FILL			14%	26%	15%	23%	4%	21%	20%
CONDUIT SIZES (INCHES)			4"	4"	4"	4"	2.5"(E)	2.5"(E) 4"	2-4"

CONDUCTOR SCHEDULE IS FURNISHED AS A GUIDELINE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY CONDUCTORS FOR THE INTENDED OPERATION.
ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED AS (E) EXISTING.
* BELDON #8281 COAXIAL CABLE

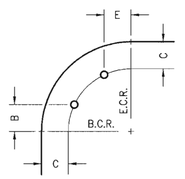
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0 10 20 40 FEET



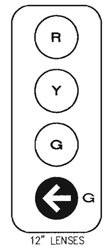
DETAIL "B"
SCALE: 1"=10'

LEGEND

- PROPOSED VIDEO DETECTION CAMERA
- PROPOSED BIKE DETECTION ZONE
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED CCTV CAMERA
- PROPOSED #6 PULL BOX (UNLESS OTHERWISE NOTED)



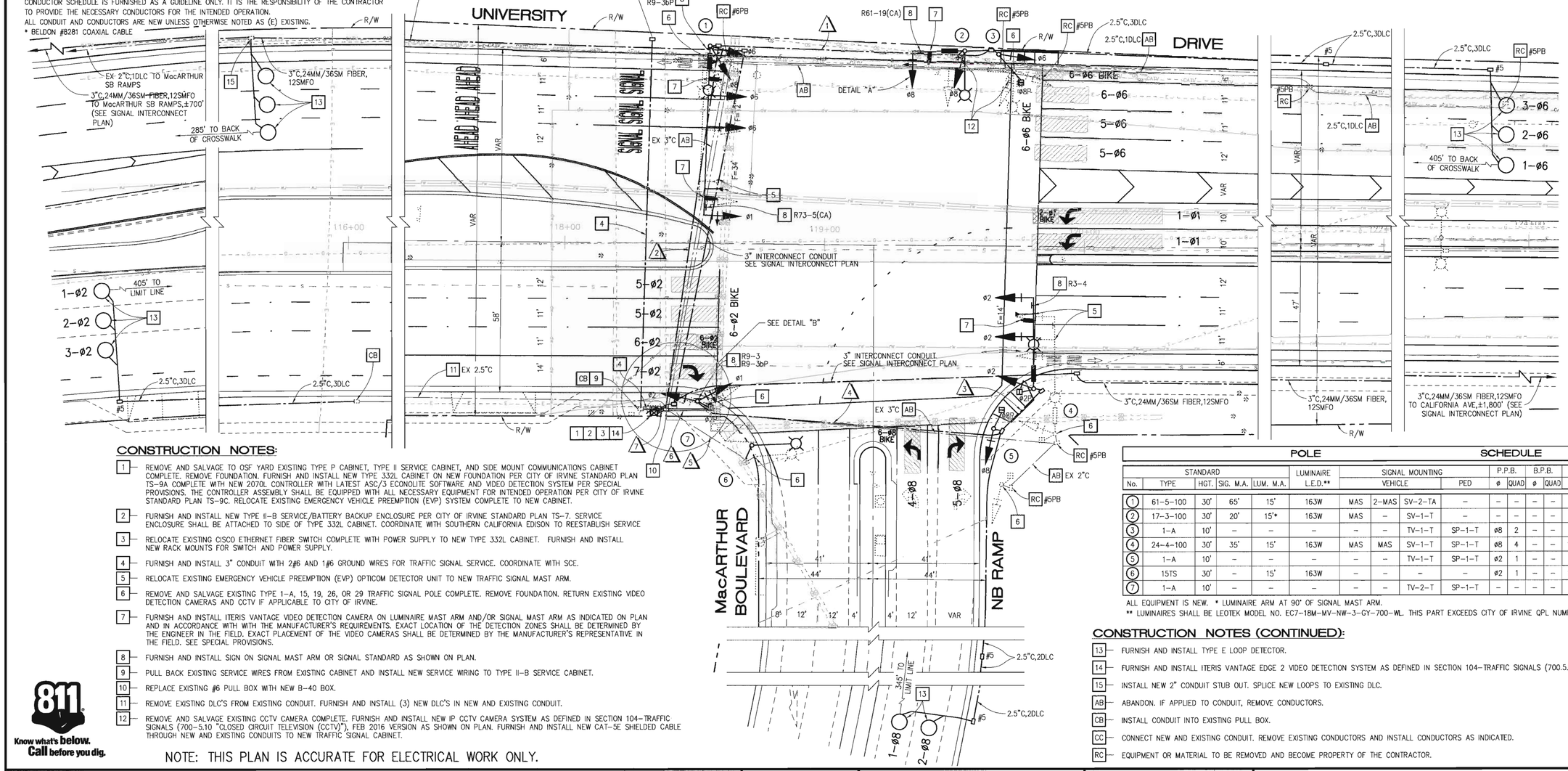
SIGNAL STANDARD PLACEMENT DETAIL
NO SCALE



12" LENSES

DETAIL "A"
NO SCALE

PHASE DIAGRAM			
ø1	ø2	ø3	ø4
ø5	ø6	ø7	ø8



SENSOR TABLE

SLOT	POSITION	CHANNEL	SLOT	POSITION	CHANNEL
I1	U	5-ø2	J1	U	1-ø2
	L	6-ø2		L	2-ø2
I2	U	1-ø5	J2	U	3-ø2
	L	2-ø5		L	4-ø2
I3	U	4-ø4	J3	U	1-ø4
	L	5-ø4		L	2-ø4
I4	U	1-ø7	J4	U	3-ø4
	L	2-ø7		L	SP
I5	U	5-ø6	J5	U	1-ø6
	L	6-ø6		L	2-ø6
I6	U	1-ø1	J6	U	3-ø6
	L	2-ø1		L	4-ø6
I7	U	4-ø8	J7	U	1-ø8
	L	◆5-ø8		L	2-ø8
I8	U	1-ø3	J8	U	3-ø8
	L	2-ø3		L	6-ø6B
I9	U	VD COM	J9	U	6-ø2B
	L			L	SP
I10	U	VD COM	J10	U	7-ø2
	L			L	DL
I11	U	ø2 BIKE	J11	U	EVA-ø2
	L	ø4 BIKE		L	EVB-ø6
I12	U	ø6 BIKE	J12	U	EVC-ø4
	L	ø8 BIKE		L	EVD-ø8
I13	U	ø2 PED	J13	U	MAN ADV
	L	ø4 PED		L	MAN EN
I14	U	ø6 PED	J14	U	FLASH SEN
	L	ø8 PED		L	STOP TIME

◆ SENSOR SCHEDULE DESIGNATED FOR RIGHT TURN DELAY FUNCTIONALITY IN 2070L CONTROLLER

POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE L.E.D.**	SIGNAL MOUNTING VEHICLE			PED	P.P.B. ø	P.P.B. QUAD	B.P.B. ø	B.P.B. QUAD	POLE LOCATION E	POLE LOCATION B	POLE LOCATION C	TYPE "A" SIGN (DOUBLE FACE L.E.D.)	NOTES
(1)	61-5-100	30'	65'	15'	163W	MAS	2-MAS	SV-2-TA	–	–	–	–	–	SEE PLAN		3.5'	MacArthur N/B Ramp	
(2)	17-3-100	30'	20'	15'*	163W	MAS	–	SV-1-T	–	–	–	–	–	SEE PLAN		4.5'	University	CCTV
(3)	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	ø8	2	–	–	–	12'	3'	–	
(4)	24-4-100	30'	35'	15'	163W	MAS	MAS	SV-1-T	SP-1-T	ø8	4	–	–	14.5'	–	4'	MacArthur N/B Ramp	
(5)	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	ø2	1	–	–	–	12'	3'	–	
(6)	15TS	30'	–	15'	163W	–	–	–	–	ø2	1	–	–	14.5'	–	2'	–	
(7)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	–	–	–	–	–	8'	2.5'	–	

ALL EQUIPMENT IS NEW. * LUMINAIRE ARM AT 90° OF SIGNAL MAST ARM.
** LUMINAIRES SHALL BE LEOTEK MODEL NO. EC7-18M-MV-NW-3-GY-700-WL. THIS PART EXCEEDS CITY OF IRVINE QPL NUMBER.

CONSTRUCTION NOTES:

1. REMOVE AND SALVAGE TO OSF YARD EXISTING TYPE P CABINET, TYPE II SERVICE CABINET, AND SIDE MOUNT COMMUNICATIONS CABINET COMPLETE. REMOVE FOUNDATION. FURNISH AND INSTALL NEW TYPE 332L CABINET ON NEW FOUNDATION PER CITY OF IRVINE STANDARD PLAN TS-9A COMPLETE WITH NEW 2070L CONTROLLER WITH LATEST ASC/3 ECONOLITE SOFTWARE AND VIDEO DETECTION SYSTEM PER SPECIAL PROVISIONS. THE CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ALL NECESSARY EQUIPMENT FOR INTENDED OPERATION PER CITY OF IRVINE STANDARD PLAN TS-9C. RELOCATE EXISTING EMERGENCY VEHICLE PREEMPTION (EVP) SYSTEM COMPLETE TO NEW CABINET.
2. FURNISH AND INSTALL NEW TYPE II-B SERVICE/BATTERY BACKUP ENCLOSURE PER CITY OF IRVINE STANDARD PLAN TS-7. SERVICE ENCLOSURE SHALL BE ATTACHED TO SIDE OF TYPE 332L CABINET. COORDINATE WITH SOUTHERN CALIFORNIA EDISON TO REESTABLISH SERVICE
3. RELOCATE EXISTING CISCO ETHERNET FIBER SWITCH COMPLETE WITH POWER SUPPLY TO NEW TYPE 332L CABINET. FURNISH AND INSTALL NEW RACK MOUNTS FOR SWITCH AND POWER SUPPLY.
4. FURNISH AND INSTALL 3" CONDUIT WITH 2#6 AND 1#6 GROUND WIRES FOR TRAFFIC SIGNAL SERVICE. COORDINATE WITH SCE.
5. RELOCATE EXISTING EMERGENCY VEHICLE PREEMPTION (EVP) OPTICOM DETECTOR UNIT TO NEW TRAFFIC SIGNAL MAST ARM.
6. REMOVE AND SALVAGE EXISTING TYPE 1-A, 15, 19, 26, OR 29 TRAFFIC SIGNAL POLE COMPLETE. REMOVE FOUNDATION. RETURN EXISTING VIDEO DETECTION CAMERAS AND CCTV IF APPLICABLE TO CITY OF IRVINE.
7. FURNISH AND INSTALL ITERIS VANTAGE VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM AND/OR SIGNAL MAST ARM AS INDICATED ON PLAN AND IN ACCORDANCE WITH WITH THE MANUFACTURER'S REQUIREMENTS. EXACT LOCATION OF THE DETECTION ZONES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXACT PLACEMENT OF THE VIDEO CAMERAS SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE IN THE FIELD. SEE SPECIAL PROVISIONS.
8. FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM OR SIGNAL STANDARD AS SHOWN ON PLAN.
9. PULL BACK EXISTING SERVICE WIRES FROM EXISTING CABINET AND INSTALL NEW SERVICE WIRING TO TYPE II-B SERVICE CABINET.
10. REPLACE EXISTING #6 PULL BOX WITH NEW B-40 BOX.
11. REMOVE EXISTING DLC'S FROM EXISTING CONDUIT. FURNISH AND INSTALL (3) NEW DLC'S IN NEW AND EXISTING CONDUIT.
12. REMOVE AND SALVAGE EXISTING CCTV CAMERA COMPLETE. FURNISH AND INSTALL NEW IP CCTV CAMERA SYSTEM AS DEFINED IN SECTION 104-TRAFFIC SIGNALS (700-5.10 "CLOSED CIRCUIT TELEVISION (CCTV)"), FEB 2016 VERSION AS SHOWN ON PLAN. FURNISH AND INSTALL NEW CAT-5E SHIELDED CABLE THROUGH NEW AND EXISTING CONDUITS TO NEW TRAFFIC SIGNAL CABINET.

CONSTRUCTION NOTES (CONTINUED):

13. FURNISH AND INSTALL TYPE E LOOP DETECTOR.
14. FURNISH AND INSTALL ITERIS VANTAGE EDGE 2 VIDEO DETECTION SYSTEM AS DEFINED IN SECTION 104-TRAFFIC SIGNALS (700.5.8.4 "VIDEO DETECTORS"), FEB 2016 VERSION.
15. INSTALL NEW 2" CONDUIT STUB OUT. SPLICE NEW LOOPS TO EXISTING DLC.
AB. ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
CB. INSTALL CONDUIT INTO EXISTING PULL BOX.
CC. CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED.
RC. EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

Know what's below. Call before you dig. 811

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RUBEN PERALES No. 83169 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992-2990
FAX 992-2883
RUBEN PERALES, R.C.E. NO. 83169 — DATE 7/20/17

		DATE
DRAWN BY:	R. PERALES	JULY 2017
DESIGNED BY:	R. PERALES	JULY 2017
CHECKED BY:	C. VEINOT	JULY 2017
RECOMMENDED BY:		DATE

TRAFFIC SIGNAL MODIFICATION PLAN
UNIVERSITY DRIVE
AT
MacARTHUR BOULEVARD NORTHBOUND RAMP
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

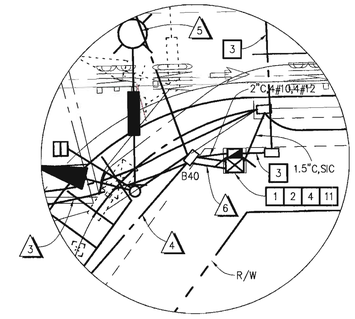
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SHEET E-1 SHT 72 OF 87

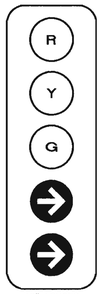
CONDUCTOR SCHEDULE

AWG SIZE, WIRE OR CABLE TYPE	STD	PHASES	CONDUIT SIZE AND RUN NUMBER 1	2	3	4	5	6
12 WIRE CONDUCTOR CABLE	1	ø1,ø3,ø6,ø4P /ø4PPB	2/1/-	-/-/-	2/1/-	-/-/-	-/-/-	2/1/-
3 WIRE CONDUCTOR CABLE	2	ø3,ø6,ø8,OLA	-/-/-	-/-/-	-/-/-	-/-/-	2/-/-	2/-/-
	3	ø2,ø2P	-/-/-	-/-/-	-/-/-	-/-/-	-/-/-	1/-/-
	4	ø8,OLA /ø2PPB	-/-/-	-/-/-	-/-/-	1/1/-	-/-/-	1/1/-
5 WIRE CONDUCTOR CABLE	5	ø4P /ø2PPB	-/-/-	1/1/-	1/1/-	-/-/-	-/-/-	1/1/-
	6	ø1,ø2,ø2P /ø4PPB	-/-/-	-/-/-	1/1/-	-/-/-	-/-/-	1/1/-
TOTAL CABLES			2/1/-	1/1/-	4/3/-	1/1/-	2/-/-	8/4/-
TYPE B DLC		ø2 DETECTOR	-	-	3	-	-	3
		ø6 DETECTOR	-	-	-	-	3	3
		ø8 DETECTOR	-	-	-	2	-	2
		TOTAL DLC'S	-	-	3	2	3	8
#10		LUMINAIRE	2	2	2	-	2	-
#12		IISNS	2	-	2	-	2	-
4#20		EVP	1	-	1	-	1	3
3-#16		VIDEO POWER CABLE	2	-	2	-	1	4
*		VIDEO CABLE	2	-	2	-	1	4
CCTV		CAT-5E (SHIELDED)	-	-	-	-	1	1
PERCENT FILL			20%	17%	37%	5%	18%	21%
CONDUIT SIZES (INCHES)			4"	4"	4"	4"	4"	2-4"

CONDUCTOR SCHEDULE IS FURNISHED AS A GUIDELINE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY CONDUCTORS FOR THE INTENDED OPERATION.
ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED AS (E) EXISTING.
* BELDON #8281 COAXIAL CABLE



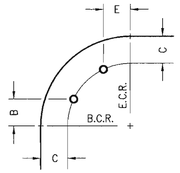
DETAIL "A"
SCALE: 1"=10'



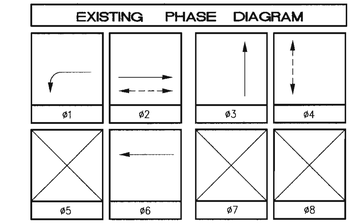
12" LENSES
DETAIL "B"
NO SCALE

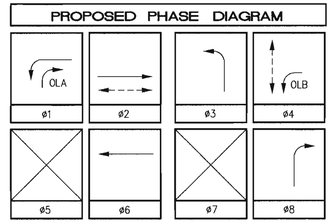
LEGEND

- PROPOSED VIDEO DETECTION CAMERA
- PROPOSED BIKE DETECTION ZONE
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED CCTV CAMERA
- PROPOSED #6 PULL BOX (UNLESS OTHERWISE NOTED)



SIGNAL STANDARD PLACEMENT DETAIL
NO SCALE

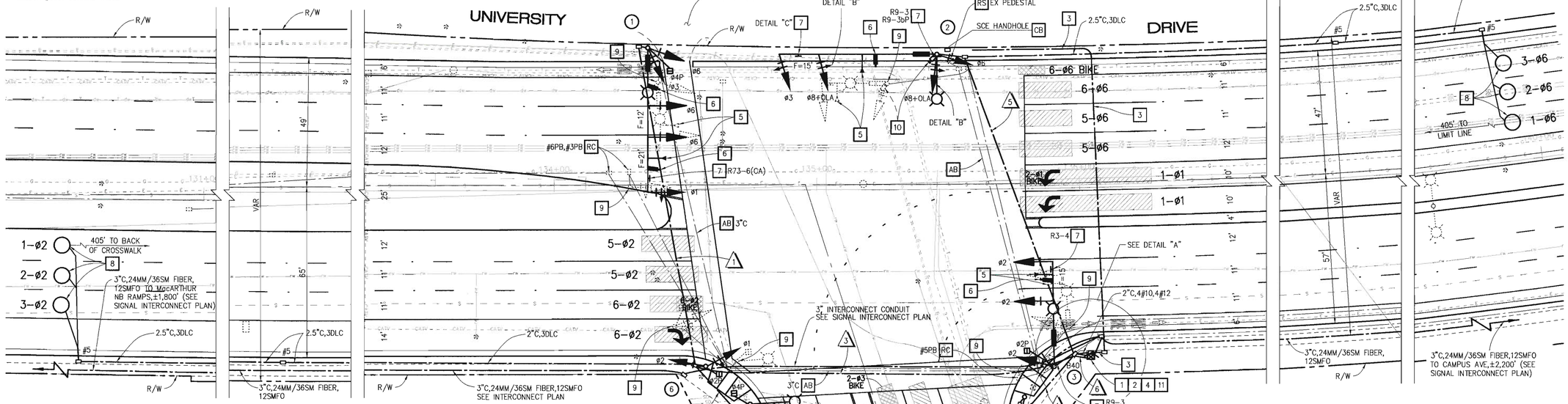




OLA = ø1+ø8
OLB = ø1+ø4



DETAIL "C"
NO SCALE



SENSOR TABLE

SLOT	POSITION	CHANNEL	SLOT	POSITION	CHANNEL
I1	U	5-ø2	J1	U	1-ø2
	L	6-ø2		L	2-ø2
I2	U	1-ø5	J2	U	3-ø2
	L	2-ø5		L	4-ø2
I3	U	4-ø4	J3	U	1-ø4
	L	◆5-ø4		L	2-ø4
I4	U	1-ø7	J4	U	3-ø4
	L	2-ø7		L	SP
I5	U	5-ø6	J5	U	1-ø6
	L	6-ø6		L	2-ø6
I6	U	1-ø1	J6	U	3-ø6
	L	2-ø1B		L	4-ø6
I7	U	4-ø8	J7	U	1-ø8
	L	◆5-ø8		L	2-ø8
I8	U	1-ø3	J8	U	3-ø8
	L	2-ø3		L	6-ø2B
I9	U	VD COM	J9	U	5-ø8B
	L			L	SP
I10	U	VD COM	J10	U	6-ø6B
	L			L	DL
I11	U	ø2 BIKE	J11	U	EVA-ø2
	L	ø4 BIKE		L	EVB-ø6
I12	U	ø6 BIKE	J12	U	EVC-ø4
	L	ø8 BIKE		L	EVD-ø8
I13	U	ø2 PED	J13	U	MAN ADV
	L	ø4 PED		L	MAN EN
I14	U	ø6 PED	J14	U	FLASH SEN
	L	ø8 PED		L	STOP TIME

◆ SENSOR SCHEDULE DESIGNATED FOR RIGHT TURN DELAY FUNCTIONALITY IN 2070L CONTROLLER

POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE L.E.D.**	SIGNAL MOUNTING VEHICLE	PED	P.P.B. ø	P.P.B. QUAD	B.P.B. ø	B.P.B. QUAD	POLE LOCATION E	B	C	TYPE "A" SIGN (DOUBLE FACE L.E.D.)	NOTES
(1)	29-5-100	30'	55'	15'	163W	MAS	2-MAS	SV-2-TA	SP-1-T	ø4	2	–	–	SEE PLAN		5'	California	
(2)	61-5-100	30'	60'	15'*	163W	MAS	MAS	SV-2-TA	–	–	–	–	–	SEE PLAN		2.5'	University	CCTV
(3)	26-4-100	30'	40'	15'	163W	MAS	MAS	SV-1-T	SP-1-T	–	–	–	–	16.5'	–	7'	California	
(4)	1-A	30'	–	–	–	–	–	TV-1-T	–	ø2	1	–	–	–	18'	4.5'	–	
(5)	15TS	30'	–	15'	163W	–	–	–	SP-1-T	ø2	1	–	–	7.5'	–	3.5'	–	
(6)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	ø4	2	–	–	–	10'	2.5'	–	

ALL EQUIPMENT IS NEW.
* LUMINAIRE ARM AT 90° OF SIGNAL MAST ARM.
** LUMINAIRES SHALL BE LEOTEK MODEL NO. EC7-18M-MV-NW-3-GY-700-WL. THIS PART EXCEEDS CITY OF IRVINE QPL NUMBER.

CONSTRUCTION NOTES:

1. REMOVE AND SALVAGE TO OSF YARD EXISTING TYPE P CABINET, TYPE II SERVICE CABINET, AND SIDE MOUNT COMMUNICATIONS CABINET COMPLETE. REMOVE FOUNDATION. FURNISH AND INSTALL NEW TYPE 332L CABINET ON NEW FOUNDATION PER CITY OF IRVINE STANDARD PLAN TS-9A COMPLETE WITH NEW 2070L CONTROLLER WITH LATEST ASC/3 ECONOLITE SOFTWARE AND VIDEO DETECTION SYSTEM PER SPECIAL PROVISIONS. THE CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ALL NECESSARY EQUIPMENT FOR INTENDED OPERATION PER CITY OF IRVINE STANDARD PLAN TS-9C. RELOCATE EXISTING EVP SYSTEM COMPLETE TO NEW CABINET.
2. FURNISH AND INSTALL NEW TYPE II-B SERVICE/BATTERY BACKUP ENCLOSURE PER CITY OF IRVINE STANDARD PLAN TS-7. SERVICE ENCLOSURE SHALL BE ATTACHED TO SIDE OF TYPE 332L CABINET. COORDINATE WITH SOUTHERN CALIFORNIA EDISON TO REESTABLISH SERVICE
3. FURNISH AND INSTALL 3" CONDUIT WITH 2#6 AND 1#6 GROUND WIRES FOR TRAFFIC SIGNAL SERVICE. COORDINATE WITH SCE.
4. RELOCATE EXISTING CISCO ETHERNET FIBER SWITCH COMPLETE WITH POWER SUPPLY TO NEW TYPE 332L CABINET. FURNISH AND INSTALL NEW RACK MOUNTS FOR SWITCH AND POWER SUPPLY.
5. RELOCATE EXISTING EMERGENCY VEHICLE PREEMPTION (EVP) OPTICOM DETECTOR UNIT TO NEW TRAFFIC SIGNAL MAST ARM.
6. FURNISH AND INSTALL ITERIS VANTAGE VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM AND/OR SIGNAL MAST ARM AS INDICATED ON PLAN AND IN ACCORDANCE WITH WITH THE MANUFACTURER'S REQUIREMENTS. EXACT LOCATION OF THE DETECTION ZONES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXACT PLACEMENT OF THE VIDEO CAMERAS SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE IN THE FIELD. SEE SPECIAL PROVISIONS.
7. FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM OR SIGNAL STANDARD AS SHOWN ON PLAN. SIGNS MOUNTED ON SIGNAL STANDARDS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 7' UNLESS OTHERWISE APPROVED BY THE ENGINEER.
8. FURNISH AND INSTALL TYPE E LOOP DETECTOR.
9. REMOVE AND SALVAGE EXISTING PED PUSH BUTTON POST, TYPE 1-A, 15, 19, 26, OR 29 TRAFFIC SIGNAL POLE COMPLETE. REMOVE FOUNDATION. RETURN EXISTING VIDEO DETECTION CAMERAS AND CCTV IF APPLICABLE TO CITY OF IRVINE.
10. REMOVE AND SALVAGE EXISTING CCTV CAMERA COMPLETE. FURNISH AND INSTALL NEW IP CCTV CAMERA SYSTEM AS DEFINED IN SECTION 104-TRAFFIC SIGNALS (700-5.10 "CLOSED CIRCUIT TELEVISION (CCTV)", FEB 2016 VERSION AS SHOWN ON PLAN. FURNISH AND INSTALL NEW CAT-5E SHIELDED CABLE THROUGH NEW AND EXISTING CONDUITS TO NEW TRAFFIC SIGNAL CABINET.
11. FURNISH AND INSTALL ITERIS VANTAGE EDGE 2 VIDEO DETECTION SYSTEM AS DEFINED IN SECTION 104-TRAFFIC SIGNALS (700.5.8.4 "VIDEO DETECTORS").

CONSTRUCTION NOTES (CONTINUED):

AB — ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
RC — EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

811 Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER — RUBEN PERALES — No. 83169 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992-2990
FAX 992-2883
RUBEN PERALES, R.C.E. NO. 83169 — 7/10/17 DATE

DRAWN BY:	R. PERALES	DATE JULY 2017
DESIGNED BY:	R. PERALES	DATE JULY 2017
CHECKED BY:	C. VEINOT	DATE JULY 2017
RECOMMENDED BY:		DATE

IRWD CODE 6788 | C.I.P. NO. 311306

TRAFFIC SIGNAL MODIFICATION PLAN
UNIVERSITY DRIVE AT CALIFORNIA AVENUE
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

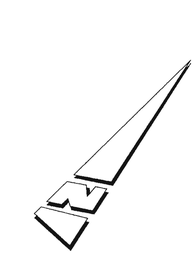
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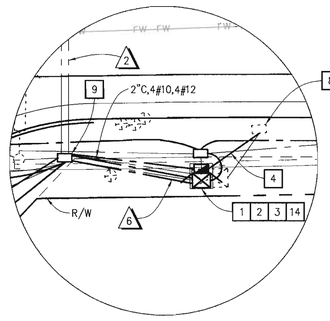
SHEET E-2 SHT 73 OF 87

CONDUCTOR SCHEDULE

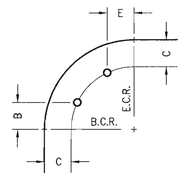
AWG SIZE, WIRE OR CABLE TYPE	STD	PHASES	CONDUIT SIZE AND RUN NUMBER 1	2	3	4	5	6
12 WIRE CONDUCTOR CABLE	①	ø1,ø3,#6,ø4P /ø4PPB	2/1/–	2/1/–	–/–/–	–/–/–	–/–/–	2/1/–
	②	ø3,ø3P /ø3PPB	–/–/–	1/1/–	–/–/–	–/–/–	–/–/–	1/1/–
3 WIRE CONDUCTOR CABLE	③	ø2,ø2P /ø3PPB	–/–/–	–/–/–	–/–/–	–/–/–	–/–/–	1/1/–
	④	ø3,ø3P /ø2PPB/ø3BPB	–/–/–	–/–/–	–/–/–	–/–/–	1/1/1	1/1/1
5 WIRE CONDUCTOR CABLE	⑤	ø4P /ø2PPB	–/–/–	–/–/–	1/1/–	1/1/–	–/–/–	1/1/–
	⑥	ø1,ø2,ø2P /ø4PPB	–/–/–	–/–/–	–/–/–	1/1/–	–/–/–	1/1/–
TOTAL CABLES			2/1/–	3/2/–	1/1/–	2/2/–	1/1/1	7/6/1
TYPE B DLC		ø2 DETECTOR	–	–	–	3	–	3
		#6 DETECTOR	–	3	–	–	–	3
		TOTAL DLC'S	–	3	–	3	–	6
#10		LUMINAIRE	2	2	2	2	2	–
#12		IISNS	2	2	–	–	–	–
4#20		EVP	1	2	–	1	–	3
3–#16		VIDEO POWER CABLE	2	3	–	–	–	4
*		VIDEO CABLE	2	3	–	–	–	4
CCTV		CAT–5E (SHIELDED)	–	1	–	–	–	1
PERCENT FILL			22%	21%	8%	22%	8%	23%
CONDUIT SIZES (INCHES)			4"	2–3"(E)	4"	4"	4"	2–4"

CONDUCTOR SCHEDULE IS FURNISHED AS A GUIDELINE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY CONDUCTORS FOR THE INTENDED OPERATION.
ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED AS (E) EXISTING.
* BELDON #8281 COAXIAL CABLE





DETAIL "A"
SCALE: 1"=10'

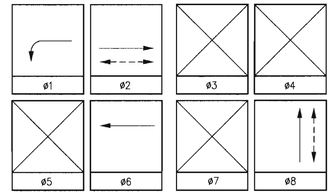


SIGNAL STANDARD PLACEMENT DETAIL
NO SCALE

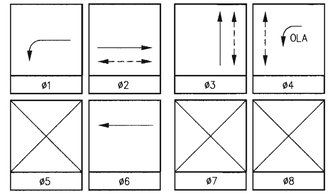
LEGEND

- PROPOSED VIDEO DETECTION CAMERA
- PROPOSED BIKE DETECTION ZONE
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED CCTV CAMERA
- PROPOSED #6 PULL BOX (UNLESS OTHERWISE NOTED)

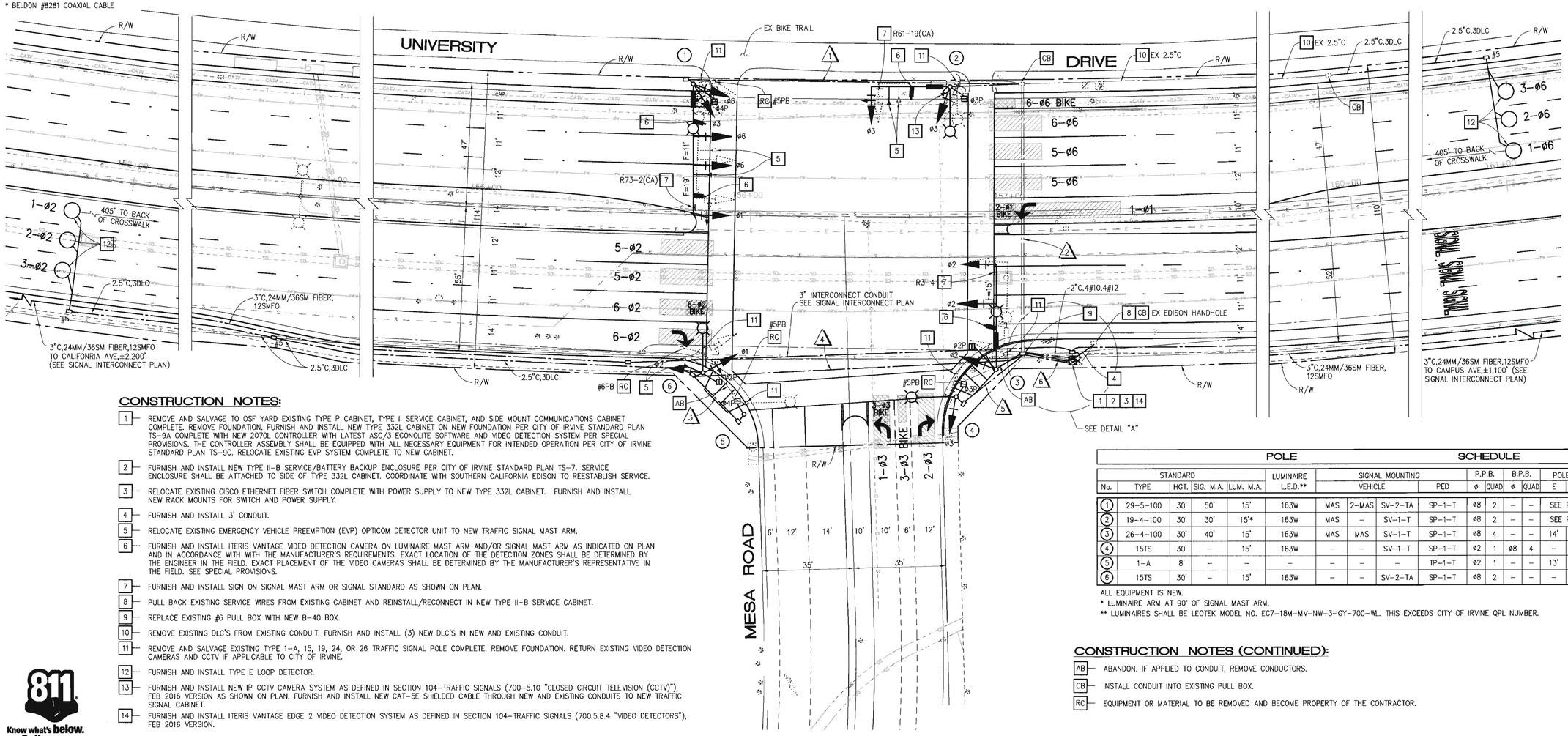
EXISTING PHASE DIAGRAM



PROPOSED PHASE DIAGRAM



OLA = ø1+ø4



SENSOR TABLE

SLOT	POSITION	CHANNEL	SLOT	POSITION	CHANNEL
I1	U	5–ø2	J1	U	1–ø2
	L	6–ø2		L	2–ø2
I2	U	1–ø5	J2	U	3–ø2
	L	2–ø5		L	4–ø2
I3	U	4–ø4	J3	U	1–ø4
	L	◆5–ø4		L	2–ø4
I4	U	1–ø7	J4	U	3–ø4
	L	2–ø7		L	SP
I5	U	5–ø6	J5	U	1–ø6
	L	6–ø6		L	2–ø6
I6	U	1–ø1	J6	U	3–ø6
	L	2–ø1		L	4–ø6
I7	U	4–ø8	J7	U	1–ø8
	L	5–ø8		L	2–ø8
I8	U	1–ø3	J8	U	3–ø8
	L	2–ø3		L	6–ø2B
I9	U	VD COM	J9	U	6–ø6B
	L			L	SP
I10	U	VD COM	J10	U	5–ø8B
	L			L	DL
I11	U	ø2 BIKE	J11	U	EVA–ø2
	L	ø4 BIKE		L	EVB–ø6
I12	U	ø6 BIKE	J12	U	EVC–ø4
	L	ø8 BIKE		L	EVD–ø8
I13	U	ø2 PED	J13	U	MAN ADV
	L	ø4 PED		L	MAN EN
I14	U	ø6 PED	J14	U	FLASH SEN
	L	ø8 PED		L	STOP TIME

◆ SENSOR SCHEDULE DESIGNATED FOR RIGHT TURN DELAY FUNCTIONALITY IN 2070L CONTROLLER

CONSTRUCTION NOTES:

1. REMOVE AND SALVAGE TO OSF YARD EXISTING TYPE P CABINET, TYPE II SERVICE CABINET, AND SIDE MOUNT COMMUNICATIONS CABINET COMPLETE. REMOVE FOUNDATION. FURNISH AND INSTALL NEW TYPE 332L CABINET ON NEW FOUNDATION PER CITY OF IRVINE STANDARD PLAN TS–9A COMPLETE WITH NEW 2070L CONTROLLER WITH LATEST ASC/3 ECONOLITE SOFTWARE AND VIDEO DETECTION SYSTEM PER SPECIAL PROVISIONS. THE CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ALL NECESSARY EQUIPMENT FOR INTENDED OPERATION PER CITY OF IRVINE STANDARD PLAN TS–9C. RELOCATE EXISTING EVP SYSTEM COMPLETE TO NEW CABINET.
2. FURNISH AND INSTALL NEW TYPE II–B SERVICE/BATTERY BACKUP ENCLOSURE PER CITY OF IRVINE STANDARD PLAN TS–7. SERVICE ENCLOSURE SHALL BE ATTACHED TO SIDE OF TYPE 332L CABINET. COORDINATE WITH SOUTHERN CALIFORNIA EDISON TO REESTABLISH SERVICE.
3. RELOCATE EXISTING CISCO ETHERNET FIBER SWITCH COMPLETE WITH POWER SUPPLY TO NEW TYPE 332L CABINET. FURNISH AND INSTALL NEW RACK MOUNTS FOR SWITCH AND POWER SUPPLY.
4. FURNISH AND INSTALL 3" CONDUIT.
5. RELOCATE EXISTING EMERGENCY VEHICLE PREEMPTION (EVP) OPTICOM DETECTOR UNIT TO NEW TRAFFIC SIGNAL MAST ARM.
6. FURNISH AND INSTALL ITERIS VANTAGE VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM AND/OR SIGNAL MAST ARM AS INDICATED ON PLAN AND IN ACCORDANCE WITH WITH THE MANUFACTURER'S REQUIREMENTS. EXACT LOCATION OF THE DETECTION ZONES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXACT PLACEMENT OF THE VIDEO CAMERAS SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE IN THE FIELD. SEE SPECIAL PROVISIONS.
7. FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM OR SIGNAL STANDARD AS SHOWN ON PLAN.
8. PULL BACK EXISTING SERVICE WIRES FROM EXISTING CABINET AND REINSTALL/RECONNECT IN NEW TYPE II–B SERVICE CABINET.
9. REPLACE EXISTING #6 PULL BOX WITH NEW B–40 BOX.
10. REMOVE EXISTING DLC'S FROM EXISTING CONDUIT. FURNISH AND INSTALL (3) NEW DLC'S IN NEW AND EXISTING CONDUIT.
11. REMOVE AND SALVAGE EXISTING TYPE 1–A, 15, 19, 24, OR 26 TRAFFIC SIGNAL POLE COMPLETE. REMOVE FOUNDATION. RETURN EXISTING VIDEO DETECTION CAMERAS AND CCTV IF APPLICABLE TO CITY OF IRVINE.
12. FURNISH AND INSTALL TYPE E LOOP DETECTOR.
13. FURNISH AND INSTALL NEW IP CCTV CAMERA SYSTEM AS DEFINED IN SECTION 104–TRAFFIC SIGNALS (700–5.10 "CLOSED CIRCUIT TELEVISION (CCTV)"), FEB 2016 VERSION AS SHOWN ON PLAN. FURNISH AND INSTALL NEW CAT–5E SHIELDED CABLE THROUGH NEW AND EXISTING CONDUITS TO NEW TRAFFIC SIGNAL CABINET.
14. FURNISH AND INSTALL ITERIS VANTAGE EDGE 2 VIDEO DETECTION SYSTEM AS DEFINED IN SECTION 104–TRAFFIC SIGNALS (700.5.8.4 "VIDEO DETECTORS"), FEB 2016 VERSION.

811 Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE L.E.D.**	SIGNAL MOUNTING VEHICLE		PED	P.P.B. ø	P.P.B. QUAD	B.P.B. ø	B.P.B. QUAD	POLE LOCATION E	B	C	TYPE "A" SIGN (DOUBLE FACE L.E.D.)	NOTES
1	29–5–100	30'	50'	15'	163W	MAS	2–MAS	SV–2–TA	SP–1–T	ø8	2	–	–	SEE PLAN		2.5'	Meso	
2	19–4–100	30'	30'	15'*	163W	MAS	–	SV–1–T	SP–1–T	ø8	2	–	–	SEE PLAN		2.5'	University	CCTV
3	26–4–100	30'	40'	15'	163W	MAS	MAS	SV–1–T	SP–1–T	ø8	4	–	–	14'	–	7.5'	Meso	
4	15TS	30'	–	15'	163W	–	–	SV–1–T	SP–1–T	ø2	1	ø8	4	–	14.5'	2.5'	–	
5	1–A	8'	–	–	–	–	–	–	TP–1–T	ø2	1	–	–	1.3'	–	2.5'	–	
6	15TS	30'	–	15'	163W	–	–	SV–2–TA	SP–1–T	ø8	2	–	–	–	13'	2.5'	–	

ALL EQUIPMENT IS NEW.
* LUMINAIRE ARM AT 90° OF SIGNAL MAST ARM.
** LUMINAIRES SHALL BE LEOTEK MODEL NO. EC7–18M–MV–NW–3–GY–700–WL. THIS EXCEEDS CITY OF IRVINE QPL NUMBER.

CONSTRUCTION NOTES (CONTINUED):

- AB — ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
- CB — INSTALL CONDUIT INTO EXISTING PULL BOX.
- RC — EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RUBEN PERALES No. 83169 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992–7990
FAX 992–2883
RUBEN PERALES, R.C.E. NO. 83169

7/10/17 DATE

		DATE
DRAWN BY:	R. PERALES	JULY 2017
DESIGNED BY:	R. PERALES	JULY 2017
CHECKED BY:	C. VEINOT	JULY 2017
RECOMMENDED BY:		DATE

TRAFFIC SIGNAL MODIFICATION PLAN
UNIVERSITY DRIVE AT MESA ROAD
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

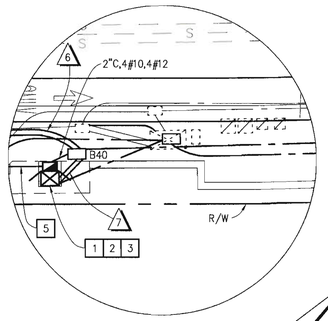
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SHEET E–3 SHT 74 OF 87

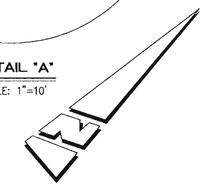
CONDUCTOR SCHEDULE

AWG SIZE, WIRE OR CABLE TYPE	STD	PHASES	CONDUIT SIZE AND RUN NUMBER 1	2	3	4	5	6	7
12 WIRE CONDUCTOR CABLE	1	ø2,ø5,ø7	1/–/–	1/–/–	1/–/–	1/–/–	–/–/–	1/–/–	1/–/–
3 WIRE CONDUCTOR CABLE	2	ø8BPB	–/–/1	–/–/1	–/–/1	–/–/1	–/–/–	–/–/1	–/–/1
	3	ø1,ø2,ø4,ø7,ø4P /ø4PPB/ø2BPB	–/–/–	–/–/–	–/–/–	–/–/–	2/1/1	2/1/1	2/1/1
	4	ø1,ø6,ø6P /ø4PPB	–/–/–	–/–/–	–/–/–	–/–/–	–/–/–	1/1/–	1/1/–
5 WIRE CONDUCTOR CABLE	5	ø3,ø4,ø4P /ø6PPB/ø4BPB	–/–/–	–/–/–	–/–/–	1/1/1	–/–/–	1/1/1	1/1/1
	6	ø3,ø8 /ø6PPB	–/–/–	–/–/–	1/1/–	1/1/–	–/–/–	1/1/–	1/1/–
	7	ø5,ø6,ø6P	–/–/–	1/–/–	1/–/–	1/–/–	–/–/–	1/–/–	1/–/–
		TOTAL CABLES	1/–/1	2/–/1	3/1/1	4/2/2	2/1/1	7/4/3	7/4/3
TYPE B DLC		ø2 DETECTOR	–	–	–	–	–	–	3
		ø4 DETECTOR	–	–	–	2	–	2	2
		ø6 DETECTOR	–	3	3	3	–	3	3
		ø8 DETECTOR	–	–	–	–	1	1	1
		TOTAL DLC'S	–	3	3	5	1	6	9
#10		LUMINAIRE	2	2	2	2	2	2	2
#12		IISNS	2	2	2	2	2	2	2
4#20		EVP	1	1	2	2	1	4	4
3–#16		VIDEO POWER CABLE	2	2	4	4	2	8	8
*		VIDEO CABLE	2	2	4	4	2	8	8
CCTV		CAT–5E (SHIELDED)	–	–	–	–	1	1	1
PERCENT FILL			9%	14%	24%	25%	18%	30%	32%
CONDUIT SIZES (INCHES)			4"	4"	4"	4"	4"(E)	2–4"	2–4"

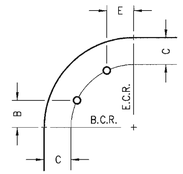
CONDUCTOR SCHEDULE IS FURNISHED AS A GUIDELINE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY CONDUCTORS FOR THE INTENDED OPERATION.
ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED AS (E) EXISTING.
* BELDON #8281 COAXIAL CABLE



DETAIL "A"
SCALE: 1"=10'

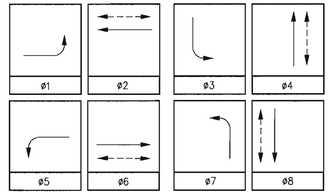


SCALE:1"=20'
0 10 20 40 FEET

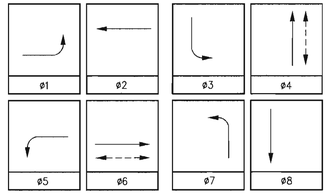


SIGNAL STANDARD PLACEMENT DETAIL
NO SCALE

EXISTING PHASE DIAGRAM

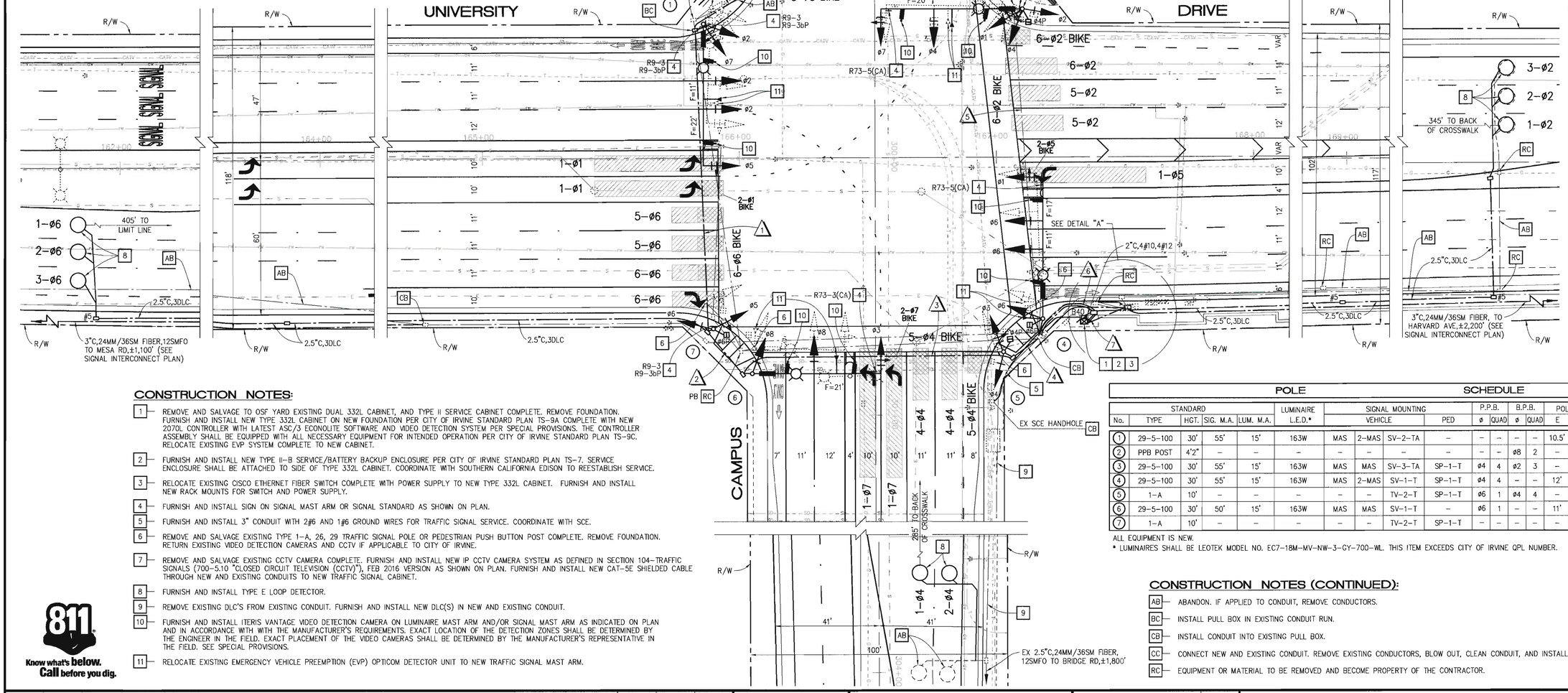


PROPOSED PHASE DIAGRAM



LEGEND

- PROPOSED VIDEO DETECTION CAMERA
- PROPOSED BIKE DETECTION ZONE
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED CCTV CAMERA
- PROPOSED #6 PULL BOX (UNLESS OTHERWISE NOTED)



SENSOR TABLE

SLOT	POSITION	CHANNEL	SLOT	POSITION	CHANNEL
I1	U	5–ø2	J1	U	1–ø2
	L	6–ø2		L	2–ø2
I2	U	1–ø5	J2	U	3–ø2
	L	2–ø5B		L	4–ø2
I3	U	4–ø4	J3	U	1–ø4
	L	◆5–ø4		L	2–ø4
I4	U	1–ø7	J4	U	3–ø4
	L	2–ø7		L	SP
I5	U	5–ø6	J5	U	1–ø6
	L	6–ø6		L	2–ø6
I6	U	1–ø1	J6	U	3–ø6
	L	2–ø1		L	4–ø6
I7	U	4–ø8	J7	U	1–ø8
	L	◆5–ø8		L	2–ø8
I8	U	1–ø3	J8	U	3–ø8
	L	2–ø3		L	5–ø8B
I9	U	VD COM	J9	U	6–ø2B
	L			L	6–ø6B
I10	U	VD COM	J10	U	5–ø4B
	L			L	DL
I11	U	ø2 BIKE	J11	U	EVA–ø2
	L	ø4 BIKE		L	EVB–ø6
I12	U	ø6 BIKE	J12	U	EVC–ø4
	L	ø8 BIKE		L	EVD–ø8
I13	U	ø2 PED	J13	U	MAN ADV
	L	ø4 PED		L	MAN EN
I14	U	ø6 PED	J14	U	FLASH SEN
	L	ø8 PED		L	STOP TIME

◆ SENSOR SCHEDULE DESIGNATED FOR RIGHT TURN DELAY FUNCTIONALITY IN 2070L CONTROLLER

CONSTRUCTION NOTES:

1. REMOVE AND SALVAGE TO OSF YARD EXISTING DUAL 332L CABINET, AND TYPE II SERVICE CABINET COMPLETE. REMOVE FOUNDATION. FURNISH AND INSTALL NEW TYPE 332L CABINET ON NEW FOUNDATION PER CITY OF IRVINE STANDARD PLAN TS–9A COMPLETE WITH NEW 2070L CONTROLLER WITH LATEST ASC/3 ECONOLITE SOFTWARE AND VIDEO DETECTION SYSTEM PER SPECIAL PROVISIONS. THE CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ALL NECESSARY EQUIPMENT FOR INTENDED OPERATION PER CITY OF IRVINE STANDARD PLAN TS–9C. RELOCATE EXISTING EVP SYSTEM COMPLETE TO NEW CABINET.
2. FURNISH AND INSTALL NEW TYPE II–B SERVICE/BATTERY BACKUP ENCLOSURE PER CITY OF IRVINE STANDARD PLAN TS–7. SERVICE ENCLOSURE SHALL BE ATTACHED TO SIDE OF TYPE 332L CABINET. COORDINATE WITH SOUTHERN CALIFORNIA EDISON TO REESTABLISH SERVICE.
3. RELOCATE EXISTING CISCO ETHERNET FIBER SWITCH COMPLETE WITH POWER SUPPLY TO NEW TYPE 332L CABINET. FURNISH AND INSTALL NEW RACK MOUNTS FOR SWITCH AND POWER SUPPLY.
4. FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM OR SIGNAL STANDARD AS SHOWN ON PLAN.
5. FURNISH AND INSTALL 3" CONDUIT WITH 2#6 AND 1#6 GROUND WIRES FOR TRAFFIC SIGNAL SERVICE. COORDINATE WITH SCE.
6. REMOVE AND SALVAGE EXISTING TYPE 1–A, 26, 29 TRAFFIC SIGNAL POLE OR PEDESTRIAN PUSH BUTTON POST COMPLETE. REMOVE FOUNDATION. RETURN EXISTING VIDEO DETECTION CAMERAS AND CCTV IF APPLICABLE TO CITY OF IRVINE.
7. REMOVE AND SALVAGE EXISTING CCTV CAMERA COMPLETE. FURNISH AND INSTALL NEW IP CCTV CAMERA SYSTEM AS DEFINED IN SECTION 104–TRAFFIC SIGNALS (700–5.10 "CLOSED CIRCUIT TELEVISION (CCTV)"), FEB 2016 VERSION AS SHOWN ON PLAN. FURNISH AND INSTALL NEW CAT–5E SHIELDED CABLE THROUGH NEW AND EXISTING CONDUITS TO NEW TRAFFIC SIGNAL CABINET.
8. FURNISH AND INSTALL TYPE E LOOP DETECTOR.
9. REMOVE EXISTING DLC'S FROM EXISTING CONDUIT. FURNISH AND INSTALL NEW DLC(S) IN NEW AND EXISTING CONDUIT.
10. FURNISH AND INSTALL ITERIS VANTAGE VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM AND/OR SIGNAL MAST ARM AS INDICATED ON PLAN AND IN ACCORDANCE WITH WITH THE MANUFACTURER'S REQUIREMENTS. EXACT LOCATION OF THE DETECTION ZONES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXACT PLACEMENT OF THE VIDEO CAMERAS SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE IN THE FIELD. SEE SPECIAL PROVISIONS.
11. RELOCATE EXISTING EMERGENCY VEHICLE PREEMPTION (EVP) OPTICOM DETECTOR UNIT TO NEW TRAFFIC SIGNAL MAST ARM.

811 Know what's below. Call before you dig.

POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE L.E.D.*	SIGNAL MOUNTING VEHICLE	PED	P.P.B. ø	P.P.B. QUAD	B.P.B. ø	B.P.B. QUAD	POLE LOCATION E	B	C	TYPE "A" SIGN (DOUBLE FACE L.E.D.)	NOTES
1	29–5–100	30'	55'	15'	163W	MAS	2–MAS	SV–2–TA	–	–	–	–	–	10.5'	–	2.5'	Campus	
2	PPB POST	4'2"	–	–	–	–	–	–	–	–	–	ø8	2	–	2.3'	2'	–	
3	29–5–100	30'	55'	15'	163W	MAS	MAS	SV–3–TA	SP–1–T	ø4	4	ø2	3	–	11'	4'	University	CCTV
4	29–5–100	30'	55'	15'	163W	MAS	2–MAS	SV–1–T	SP–1–T	ø4	4	–	–	12'	–	4.5	Campus	
5	1–A	10'	–	–	–	–	–	TV–2–T	SP–1–T	ø6	1	ø4	4	–	15.5'	2.5'	–	
6	29–5–100	30'	50'	15'	163W	MAS	MAS	SV–1–T	–	ø6	1	–	–	11'	–	3.5'	University	
7	1–A	10'	–	–	–	–	–	TV–2–T	SP–1–T	–	–	–	–	–	14'	3'	–	

ALL EQUIPMENT IS NEW.
* LUMINAIRES SHALL BE LEOTEK MODEL NO. EC7–18M–MV–NW–3–GY–700–WL. THIS ITEM EXCEEDS CITY OF IRVINE QPL NUMBER.

CONSTRUCTION NOTES (CONTINUED):

- AB — ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
- BC — INSTALL PULL BOX IN EXISTING CONDUIT RUN.
- CB — INSTALL CONDUIT INTO EXISTING PULL BOX.
- CC — CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS, BLOW OUT, CLEAN CONDUIT, AND INSTALL CONDUCTORS AS INDICATED.
- RC — EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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6					
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1					

REGISTERED PROFESSIONAL ENGINEER RUBEN PERALES No. 83169 CIVIL STATE OF CALIFORNIA

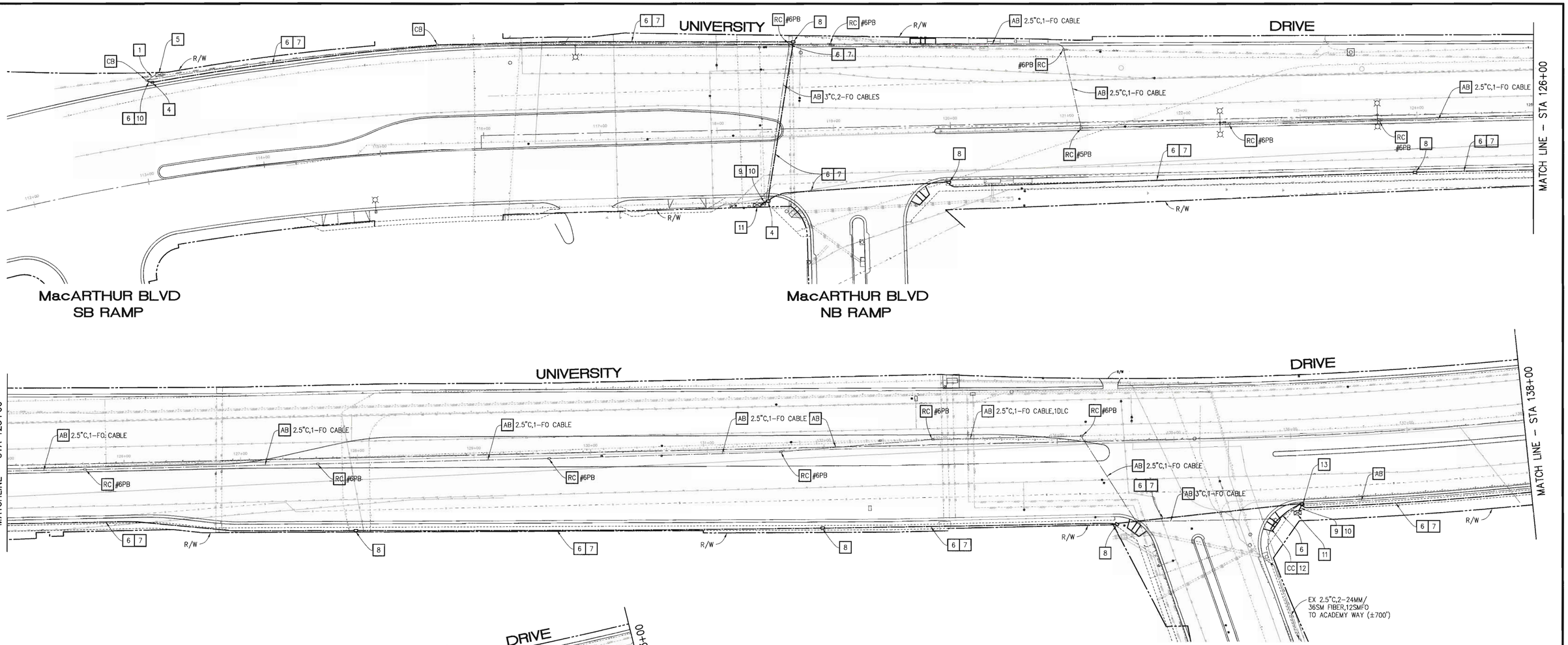
PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992–2990
FAX 992–2883
RUBEN PERALES, R.C.E. NO. 83169 — DATE 7/10/17

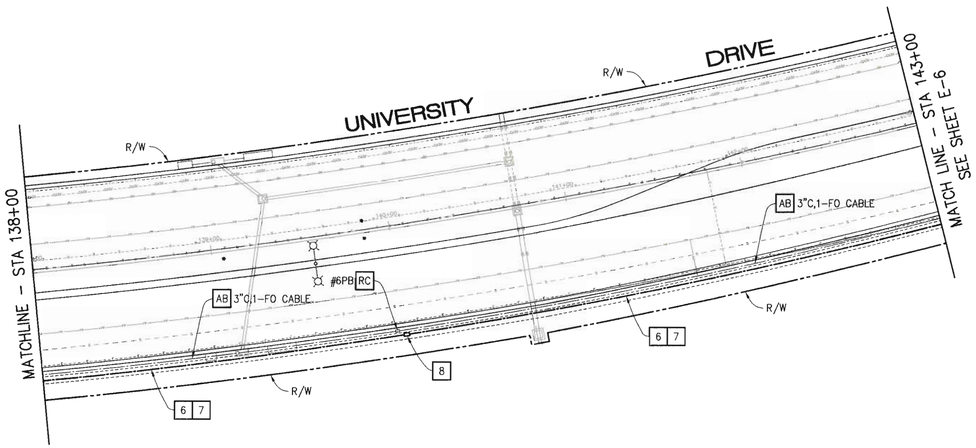
		DATE
DRAWN BY:	R. PERALES	JULY 2017
DESIGNED BY:	R. PERALES	JULY 2017
CHECKED BY:	C. VEINOT	JULY 2017
RECOMMENDED BY:		DATE

TRAFFIC SIGNAL MODIFICATION PLAN
UNIVERSITY DRIVE AT CAMPUS DRIVE
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

SHEET E–4 SHT 75 OF 87





CONSTRUCTION NOTES (THIS SHEET):

1 — REMOVE EXISTING FIBER OPTIC CABLE COMPLETE. FURNISH AND INSTALL (1) 60–FIBER HYBRID DROP CABLE IN EXISTING CONDUIT FROM NEW SPLICE CANISTER TO EXISTING SIGNAL CABINET.

2 — REMOVE EXISTING FIBER OPTIC CABLE COMPLETE. FURNISH AND INSTALL (1) 60–FIBER HYBRID AND (1) 12–FIBER SMF CABLES IN EXISTING CONDUIT.

3 — FURNISH AND INSTALL 3" CONDUIT FROM NEW C40 BOX TO EXISTING #6 PULL BOX AS SHOWN ON PLAN. FURNISH AND INSTALL 60–FIBER HYBRID AND 12–FIBER SMF CABLES IN NEW CONDUIT TO NEW C40 BOX.

4 — FURNISH AND INSTALL NEW C40 BOX. FURNISH AND INSTALL SPLICE CANISTER PER CITY OF IRVINE SPECIFICATIONS IN NEW C40 BOX. FUSION SPLICE NEW 60–FIBER HYBRID CABLE IN NEW SPLICE CANISTER AS DIRECTED BY THE CITY OF IRVINE REPRESENTATIVE. LEAVE SEALED 100' SLACK OF 12–FIBER SMF CABLE IN C40 BOX.

5 — TERMINATE NEW 60–FIBER HYBRID CABLE IN EXISTING FIBER OPTIC INTERCONNECT UNIT. TERMINATIONS AND SPLICING SHALL BE AS DIRECTED BY CITY OF IRVINE REPRESENTATIVE.

6 — FURNISH AND INSTALL 3" CONDUIT.

7 — FURNISH AND INSTALL (1) 60–FIBER HYBRID AND (1) 12–FIBER SMF CABLES IN NEW CONDUIT.

8 — FURNISH AND INSTALL NEW #6 PULL BOX PER CITY OF IRVINE STANDARD PLAN TS–2.

9 — FURNISH AND INSTALL 1.5" CONDUIT FROM NEW C40 BOX TO NEW TRAFFIC SIGNAL CABINET LOCATION.

10 — FURNISH AND INSTALL (1) 60–FIBER HYBRID DROP CABLE IN NEW CONDUIT.

11 — FURNISH AND INSTALL NEW FIBER INTERCONNECT UNIT (FIU) (CCH–02U) COMPLETE WITH ALL NECESSARY CONNECTOR PANELS AND FIBER JUMPERS IN NEW TYPE 332L CABINET. TERMINATE FIBER OPTIC CABLE TO REESTABLISH COMMUNICATIONS TO CITY OF IRVINE TRAFFIC MANAGEMENT CENTER (TMC). CONTACT CITY OF IRVINE TO OBTAIN FIBER ASSIGNMENT DETAILS. RECONNECT JUMPERS TO MATCH EXISTING.

12 — PULL BACK EXISTING FIBER OPTIC CABLES FROM EXISTING TRAFFIC SIGNAL CABINET TO NEAREST PULL BOX. REINSTALL EXISTING FIBER OPTIC CABLES THROUGH NEW AND EXISTING CONDUIT TO NEW C40 BOX.

13 — REPLACE EXISTING PULL BOX WITH NEW C40 BOX. FURNISH AND INSTALL SPLICE CANISTER PER CITY OF IRVINE SPECIFICATIONS IN NEW B40 BOX. FUSION SPLICE NEW 60–FIBER HYBRID CABLE IN NEW SPLICE CANISTER AS DIRECTED BY THE CITY OF IRVINE REPRESENTATIVE. LEAVE SEALED 100' SLACK OF 12–FIBER SMF CABLE IN C40 BOX.

AB — ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.

CB — INSTALL CONDUIT INTO EXISTING PULL BOX.

CC — CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED.

RC — EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

SCALE:1"=40'

811 Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR TRAFFIC SIGNAL INTERCONNECT WORK ONLY.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
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REGISTERED PROFESSIONAL ENGINEER — RUBEN PERALES — No. 83169 — CIVIL — STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992–2990
FAX 992–2883

RUBEN PERALES, R.C.E. NO. 83169 — 7/10/17 DATE

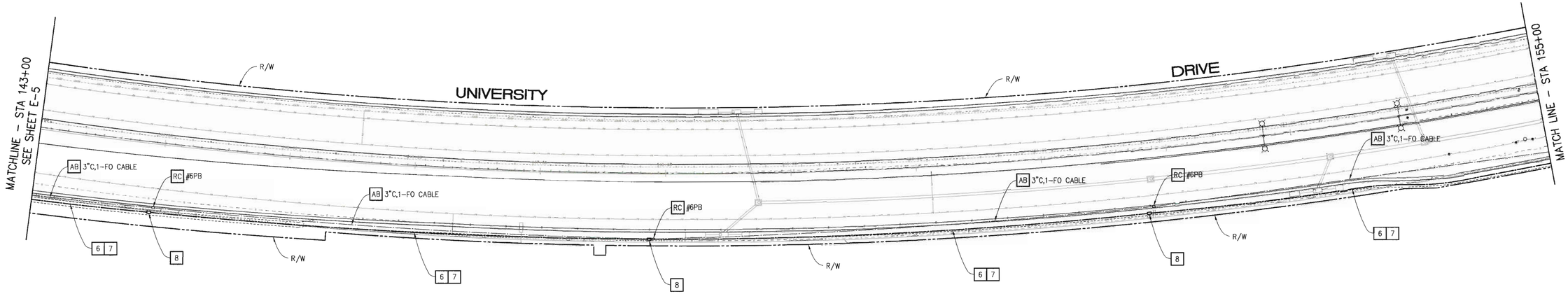
		DATE
DRAWN BY:	R. PERALES	JULY 2017
DESIGNED BY:	R. PERALES	JULY 2017
CHECKED BY:	C. VEINOT	JULY 2017
RECOMMENDED BY:		DATE

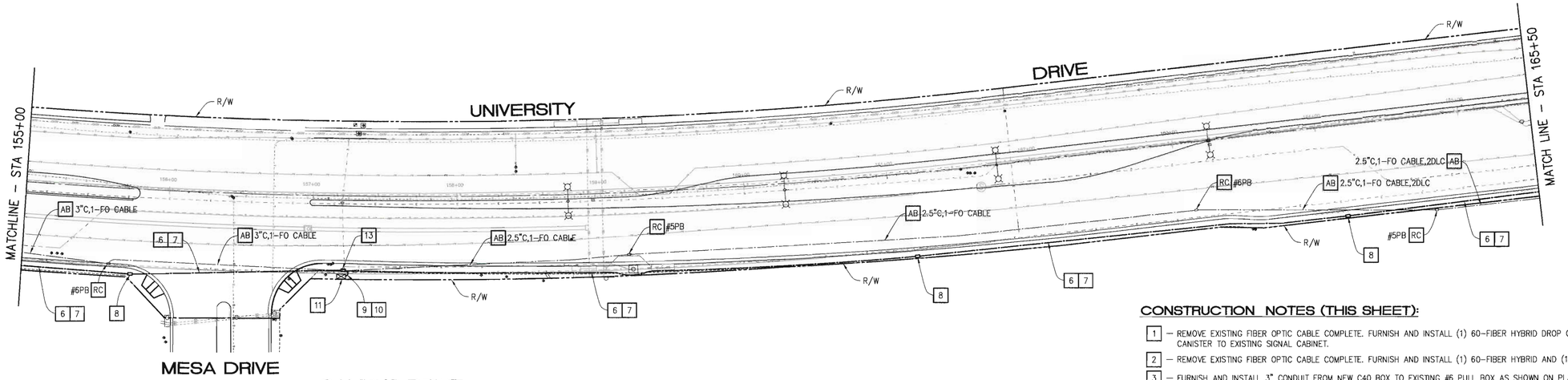
TRAFFIC SIGNAL INTERCONNECT PLAN
UNIVERSITY DRIVE
MacARTHUR BOULEVARD TO E/O MESA ROAD

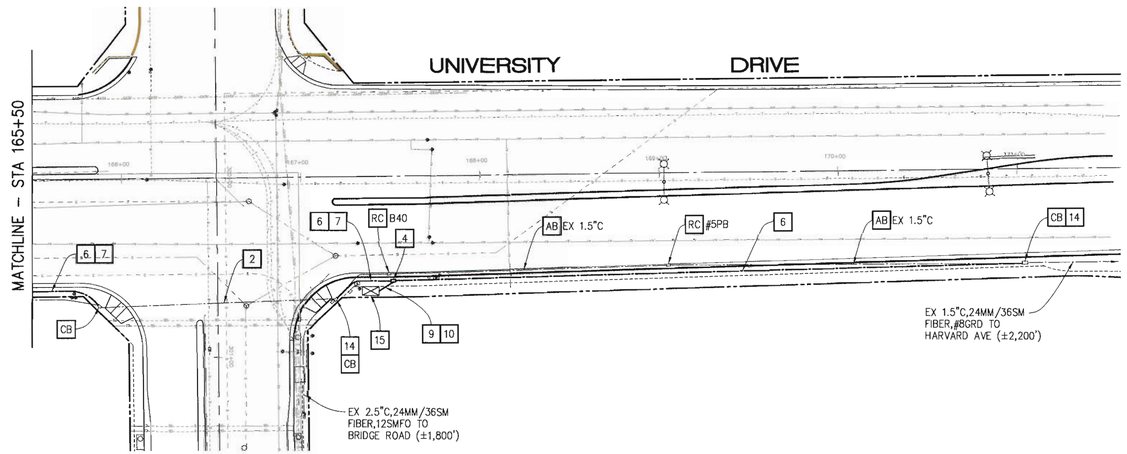
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

SHEET E–5 SHT 76 OF 87







SCALE:1"=40'

CONSTRUCTION NOTES (THIS SHEET):

1 – REMOVE EXISTING FIBER OPTIC CABLE COMPLETE. FURNISH AND INSTALL (1) 60-FIBER HYBRID DROP CABLE IN EXISTING CONDUIT FROM NEW SPLICE CANISTER TO EXISTING SIGNAL CABINET.

2 – REMOVE EXISTING FIBER OPTIC CABLE COMPLETE. FURNISH AND INSTALL (1) 60-FIBER HYBRID AND (1) 12-FIBER SMF CABLES IN EXISTING CONDUIT.

3 – FURNISH AND INSTALL 3" CONDUIT FROM NEW C40 BOX TO EXISTING #6 PULL BOX AS SHOWN ON PLAN. FURNISH AND INSTALL 60-FIBER HYBRID AND 12-FIBER SMF CABLES IN NEW CONDUIT TO NEW C40 BOX.

4 – FURNISH AND INSTALL NEW C40 BOX. FURNISH AND INSTALL SPLICE CANISTER PER CITY OF IRVINE SPECIFICATIONS IN NEW C40 BOX. FUSION SPLICE NEW 60-FIBER HYBRID CABLE IN NEW SPLICE CANISTER AS DIRECTED BY THE CITY OF IRVINE REPRESENTATIVE. LEAVE SEALED 100' SLACK OF 12-FIBER SMF CABLE IN C40 BOX.

5 – TERMINATE NEW 60-FIBER HYBRID CABLE IN EXISTING FIBER OPTIC INTERCONNECT UNIT. TERMINATIONS AND SPLICING SHALL BE AS DIRECTED BY CITY OF IRVINE REPRESENTATIVE.

6 – FURNISH AND INSTALL 3" CONDUIT.

7 – FURNISH AND INSTALL (1) 60-FIBER HYBRID AND (1) 12-FIBER SMF CABLES IN NEW CONDUIT.

8 – FURNISH AND INSTALL NEW #6 PULL BOX PER CITY OF IRVINE STANDARD PLAN TS-2.

9 – FURNISH AND INSTALL 1.5" CONDUIT FROM NEW C40 BOX TO NEW TRAFFIC SIGNAL CABINET LOCATION.

10 – FURNISH AND INSTALL (1) 60-FIBER HYBRID DROP CABLE IN NEW CONDUIT.

11 – FURNISH AND INSTALL NEW FIBER INTERCONNECT UNIT (FIU) (CCH-02U) COMPLETE WITH ALL NECESSARY CONNECTOR PANELS AND FIBER JUMPERS IN NEW TYPE 332L CABINET. TERMINATE FIBER OPTIC CABLE TO REESTABLISH COMMUNICATIONS TO CITY OF IRVINE TRAFFIC MANAGEMENT CENTER (TMC). CONTACT CITY OF IRVINE TO OBTAIN FIBER ASSIGNMENT DETAILS. RECONNECT JUMPERS TO MATCH EXISTING.

12 – PULL BACK EXISTING FIBER OPTIC CABLES FROM EXISTING TRAFFIC SIGNAL CABINET TO NEAREST PULL BOX. REINSTALL EXISTING FIBER OPTIC CABLES THROUGH NEW AND EXISTING CONDUIT TO NEW C40 BOX.

13 – REPLACE EXISTING PULL BOX WITH NEW C40 BOX. FURNISH AND INSTALL SPLICE CANISTER PER CITY OF IRVINE SPECIFICATIONS IN NEW B40 BOX. FUSION SPLICE NEW 60-FIBER HYBRID CABLE IN NEW SPLICE CANISTER AS DIRECTED BY THE CITY OF IRVINE REPRESENTATIVE. LEAVE SEALED 100' SLACK OF 12-FIBER SMF CABLE IN C40 BOX.

14 – PULL BACK EXISTING FIBER OPTIC CABLES FROM EXISTING TRAFFIC SIGNAL CABINET. REINSTALL EXISTING FIBER OPTIC CABLES THROUGH NEW AND EXISTING CONDUIT TO NEW LOCATION OF RELOCATED ATMS DUAL 332 CABINET.

15 – TERMINATE NEW AND EXISTING FIBER OPTIC CABLES IN NEW OR EXISTING FIBER OPTIC INTERCONNECT UNITS. TERMINATIONS AND SPLICING SHALL BE AS DIRECTED BY CITY OF IRVINE REPRESENTATIVE.

16 – FURNISH AND INSTALL 4" CONDUIT.

17 – FURNISH AND INSTALL NEW C40 BOX.

AB – ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.

CB – INSTALL CONDUIT INTO EXISTING PULL BOX.

CC – CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED.

RC – EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

811 Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR TRAFFIC SIGNAL INTERCONNECT WORK ONLY.

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER – RUBEN PERALES – No. 83169 – CIVIL – STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992-2990
FAX 992-2883
RUBEN PERALES, R.C.E. NO. 83169 — DATE 7/11/17

		DATE
DRAWN BY:	R. PERALES	JULY 2017
DESIGNED BY:	R. PERALES	JULY 2017
CHECKED BY:	C. VEINOT	JULY 2017
RECOMMENDED BY:		DATE

TRAFFIC SIGNAL INTERCONNECT PLAN

UNIVERSITY DRIVE

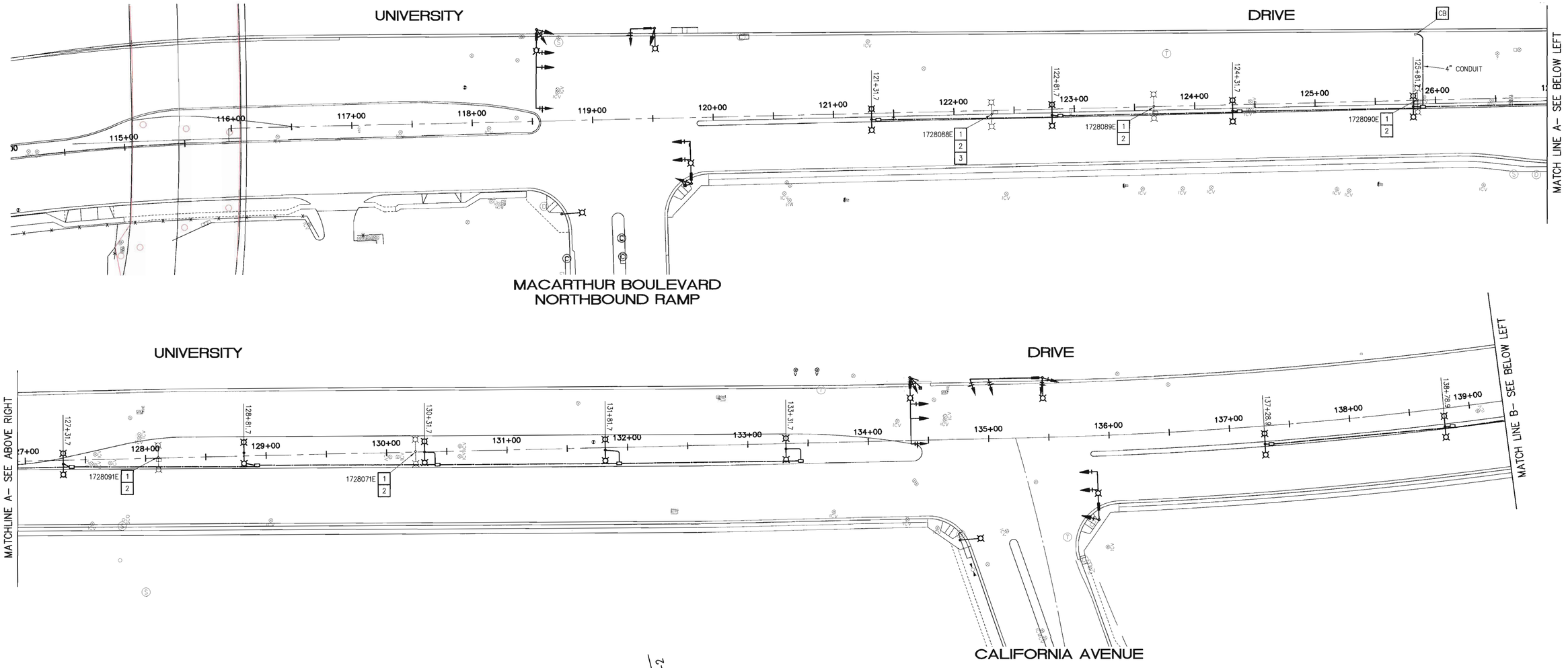
E/O MESA ROAD TO CAMPUS AVENUE

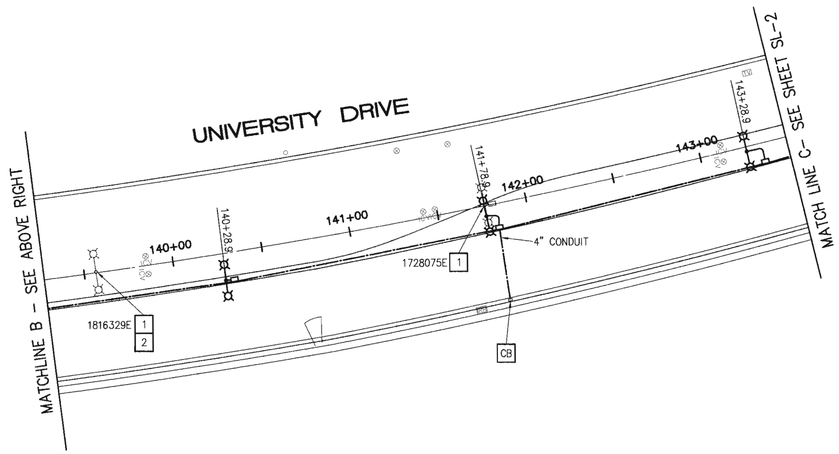
CITY OF IRVINE

PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284-EMC

SHEET E-6 SHT 77 OF 87





SCALE: 1"= 40'

Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR STREET LIGHTING WORK ONLY.

GENERAL NOTES:

1. ALL STREET LIGHTING IS OWNED AND MAINTAINED BY SOUTHERN CALIFORNIA EDISON (SCE).
2. ALL STREET LIGHTING POLES, FOUNDATIONS, ARMS AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED BY SCE.
3. ALL UNDERGROUND WIRING SHALL BE FURNISHED AND INSTALLED BY SCE.
4. ALL UNDERGROUND CONDUIT AND STUB–OUT CONDUIT TO PROPOSED POLE LOCATION SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR PER SCE REQUIREMENTS..
5. ALL PULL BOXES/HAND HOLES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR PER SCE REQUIREMENTS.
6. ALL EXISTING STREET LIGHTING FOUNDATIONS AND PULL BOXES/HAND HOLES SHALL BE ABANDONED AND REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
7. ALL EXISTING STREET LIGHTING CONDUIT SHALL BE ABANDONED AND REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO CONTACT SCG FOR THE REMOVAL OF EXISTING ANTENNA'S FROM THE STREET LIGHT POLES.
9. CONTRACTOR SHALL REVIEW FINAL SCE DESIGN PRIOR TO ANY STARTING ANY STREET LIGHTING WORK.

CONSTRUCTION NOTES (THIS SHEET):

1 — REMOVE AND SALVAGE EXISTING MARBELITE STREET LIGHT POLE COMPLETE (BY SCE).

2 — REMOVE AND SALVAGE EXISTING BANNER FROM STREET LIGHT POLE (BY CITY).

3 — REMOVE AND SALVAGE EXISTING ANTENNA FROM STREET LIGHT POLE (BY SCG).

4 — REMOVE AND SALVAGE EXISTING SIGN(S) FROM STREET LIGHT POLE (BY CONTRACTOR).

LEGEND:

- SCE 30' OCTAGON POLE (SCE INSTALLED)
  8 ' DOUBLE MAST–ARM (SCE INSTALLED)
  143W LED LUMINAIRES –150W HPS EQUIVALENT (CATALOG NO. ERS1–E3–C1–5–40–A–GRAY) (SCE INSTALLED)
- NEW STREET LIGHT CONDUIT (CONTRACTOR INSTALLED)
  3" CONDUIT HH TO HH; 1.5" CONDUIT HH TO SL; 4" CONDUIT FOR STREET CROSSINGS
- NEW SCE PULL BOX/HAND HOLE (13"X24") (CONTRACTOR INSTALLED)
- CB — INSTALL NEW CONDUIT INTO EXISTING PULL BOX (BY CONTRACTOR)
- CC — CONNECT NEW AND EXISTING CONDUIT (BY CONTRACTOR)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 10 20 40 80 FEET

IRWD CODE 6788 | C.I.P. NO. 311306

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RUBEN PERALES No. 83169 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992–2990
FAX 992–2883

RUBEN PERALES, R.C.E. NO. 83169 — DATE 7/26/17

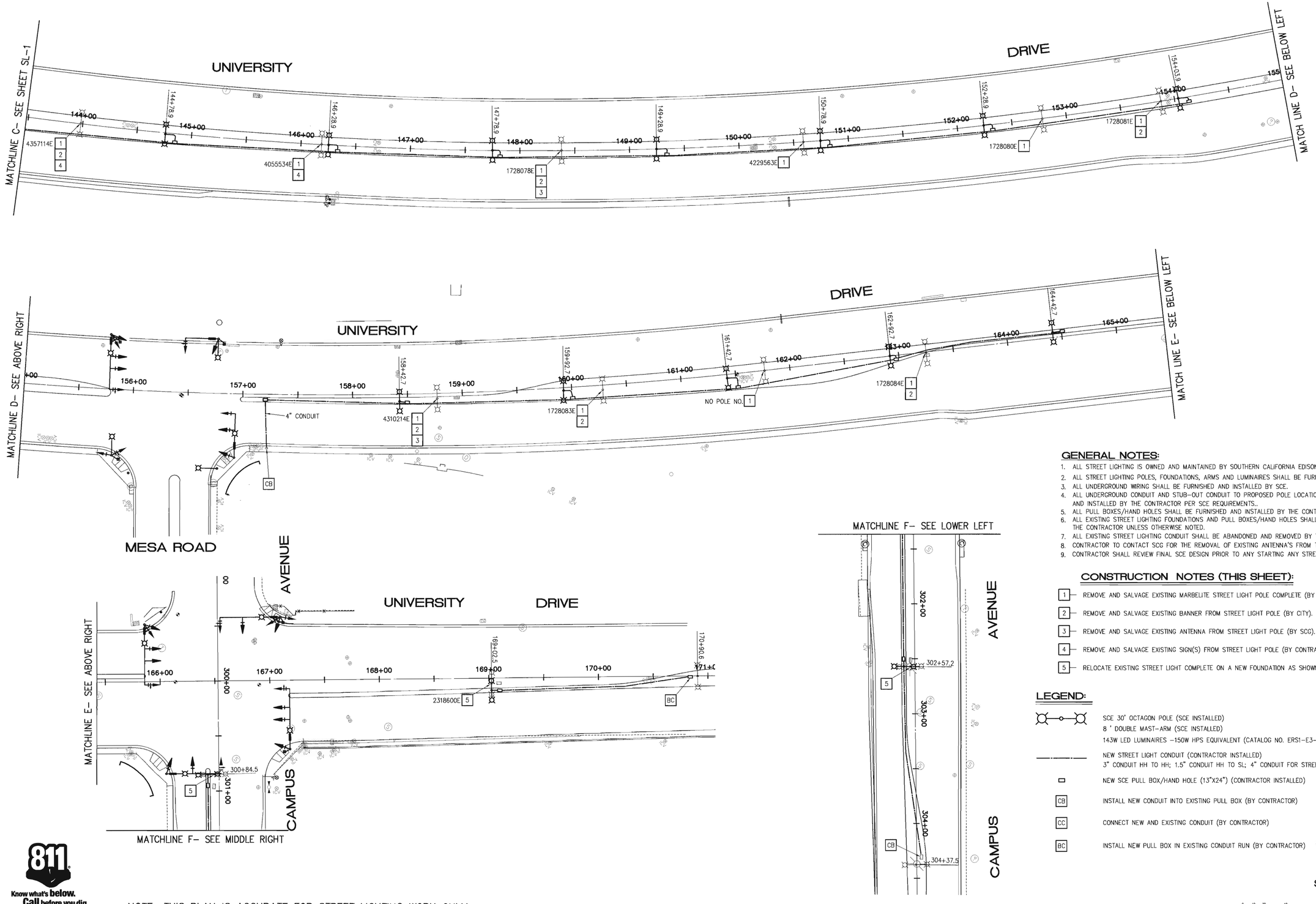
		DATE
DRAWN BY:	CAV	JULY 2017
DESIGNED BY:	CAV	JULY 2017
CHECKED BY:	R. PERALES	JULY 2017
RECOMMENDED BY:		DATE

STREET LIGHTING PLAN
UNIVERSITY DRIVE
STA 114+00 TO STA 143+50

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00663284–EMC

SHEET SL–1 SHT 78 OF 87



GENERAL NOTES:

1. ALL STREET LIGHTING IS OWNED AND MAINTAINED BY SOUTHERN CALIFORNIA EDISON (SCE).
2. ALL STREET LIGHTING POLES, FOUNDATIONS, ARMS AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED BY SCE.
3. ALL UNDERGROUND WIRING SHALL BE FURNISHED AND INSTALLED BY SCE.
4. ALL UNDERGROUND CONDUIT AND STUB-OUT CONDUIT TO PROPOSED POLE LOCATION SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR PER SCE REQUIREMENTS..
5. ALL PULL BOXES/HAND HOLES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR PER SCE REQUIREMENTS.
6. ALL EXISTING STREET LIGHTING FOUNDATIONS AND PULL BOXES/HAND HOLES SHALL BE ABANDONED AND REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
7. ALL EXISTING STREET LIGHTING CONDUIT SHALL BE ABANDONED AND REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO CONTACT SCG FOR THE REMOVAL OF EXISTING ANTENNA'S FROM THE STREET LIGHT POLES.
9. CONTRACTOR SHALL REVIEW FINAL SCE DESIGN PRIOR TO ANY STARTING ANY STREET LIGHTING WORK.

CONSTRUCTION NOTES (THIS SHEET):

1. REMOVE AND SALVAGE EXISTING MARBELITE STREET LIGHT POLE COMPLETE (BY SCE).
2. REMOVE AND SALVAGE EXISTING BANNER FROM STREET LIGHT POLE (BY CITY).
3. REMOVE AND SALVAGE EXISTING ANTENNA FROM STREET LIGHT POLE (BY SCG).
4. REMOVE AND SALVAGE EXISTING SIGN(S) FROM STREET LIGHT POLE (BY CONTRACTOR).
5. RELOCATE EXISTING STREET LIGHT COMPLETE ON A NEW FOUNDATION AS SHOWN (BY SCE).

LEGEND:

- SCE 30' OCTAGON POLE (SCE INSTALLED)
  8 ' DOUBLE MAST-ARM (SCE INSTALLED)
  143W LED LUMINAIRES -150W HPS EQUIVALENT (CATALOG NO. ERS1-E3-C1-5-40-A-GRAY) (SCE INSTALLED)
- NEW STREET LIGHT CONDUIT (CONTRACTOR INSTALLED)
  3" CONDUIT HH TO HH; 1.5" CONDUIT HH TO SL; 4" CONDUIT FOR STREET CROSSINGS
- NEW SCE PULL BOX/HAND HOLE (13"X24") (CONTRACTOR INSTALLED)
- CB — INSTALL NEW CONDUIT INTO EXISTING PULL BOX (BY CONTRACTOR)
- CC — CONNECT NEW AND EXISTING CONDUIT (BY CONTRACTOR)
- BC — INSTALL NEW PULL BOX IN EXISTING CONDUIT RUN (BY CONTRACTOR)

SCALE:1"=40'

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 10 20 40 80 FEET

Know what's below. Call before you dig.

NOTE: THIS PLAN IS ACCURATE FOR STREET LIGHTING WORK ONLY.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

REGISTERED PROFESSIONAL ENGINEER RUBEN PERALES No. 83169 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
211 Imperial Hwy., Suite 208 Fullerton, CA 92835
(714) 992-2990
FAX 992-2883
RUBEN PERALES, R.C.E. NO. 83169 — 7/10/17 DATE

DRAWN BY:	CAV	DATE JULY 2017
DESIGNED BY:	CAV	DATE JULY 2017
CHECKED BY:	R. PERALES	DATE JULY 2017
RECOMMENDED BY:		DATE

STREET LIGHTING PLAN

UNIVERSITY DRIVE: STA 143+50 TO STA 171+00

CAMPUS DRIVE: STA 300+00 TO STA 304+50

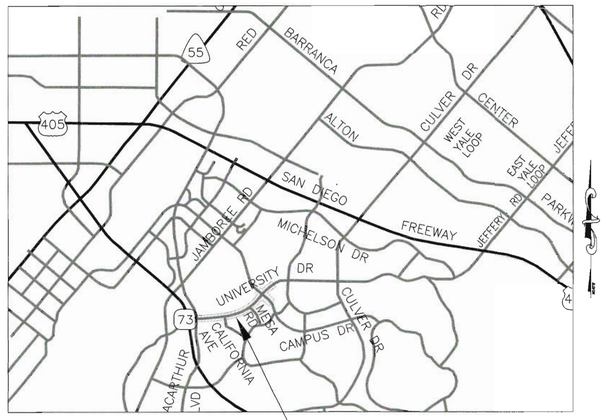
CITY OF IRVINE

PUBLIC WORKS DEPARTMENT

IRWD CODE 6788 | C.I.P. NO. 311306

PLAN CHECK NO. 00663284-EMC

SHEET SL-2 SHT 79 OF 87



LOCATION MAP

NO SCALE

LEGEND

- AIR RELEASE & VACCUM VALVE
- BLOW OFF/ BOTTOM DRAIN
- CATCH BASIN MANHOLE
- CENTERLINE MONUMENT
- CALTRANS
- EDGE OF PAVEMENT
- ELECTRIC MANHOLE
- ELECTRIC PULLBOX
- FIBER OPTIC PULLBOX
- FIRE HYDRANT
- GAS VALVE
- GAS LINE MARKER
- GUARD POST
- IRRIGATION CONTROL VALVE
- IRRIGATION UTILITY FEATURE
- MONUMENT/SURVEY SPIKE AND WASHER
- POWER POLE/STREET LIGHT
- SANITARY SEWER MANHOLE
- SEWER CLEAN OUT
- SIGN
- SIGNAL OVERHANG
- STORM DRAIN MANHOLE
- STREET LIGHT PULLBOX
- TELEPHONE MANHOLE
- TRAFFIC LOOP
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL PULLBOX
- VALVE
- WATER METER
- WATER LINE MARKER

- 24" RW — RECYCLED WATER (IRWD)
- 12" G — GAS
- 16" S — SEWER
- 12" DW — DOMESTIC WATER (IRWD)
- 60"SD — STORM DRAIN
- CATV — CABLE TV
- E — EDISON
- T — TELEPHONE
- TS — TRAFFIC SIGNAL
- RIGHT OF WAY

ABBREVIATIONS

AB	AGGREGATE BASE	NTS	NOT TO SCALE
AC	ASPHALT CONCRETE	O.C.	ON CENTER
AV	AIR RELEASE & VACUUM VALVE	P.C.C./PCC	PORTLAND CEMENT CONCRETE
AT&T	AMERICAN TELEPHONE & TELEGRAPH CO.	PROP	PROPOSED
BFV	BUTTERFLY VALVE	PVI	POINT OF VERTICAL INTERSECTION
BO	BLOW OFF	PVMT	PAVEMENT
C&G	CURB AND GUTTER	RC	RELATIVE COMPACTION
CB	CATCH BASIN	RL	RELOCATE
CF	CURB FACE	RW	RECYCLED WATER
CL, ℄	CENTERLINE	R/W, ROW	RIGHT-OF-WAY
CML&C	CEMENT-MORTAR LINED AND COATED	SCE	SOUTHERN CALIFORNIA EDISON
C.N.	CONSTRUCTION NOTE	SCO	SEWER CLEAN OUT
CONC	CONCRETE	SDMH	STORM DRAIN MANHOLE
CORP	CORPORATION	SDWK	SIDEWALK
CP	CATHODIC PROTECTION TEST STATION	SFM	SEWER FORCE MAIN
CPL	COUPLING	SL	STREET LIGHT
CTV, CATV	CABLE TELEVISION	SLPB	STREET LIGHT PULL BOX
DW	DOMESTIC WATER	S'LY	SOUTHERLY
DWG	DRAWING	SMH	SEWER MANHOLE
EG	EXISTING GROUND	SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
EM	ELECTRICAL METER		
EMH	ELECTRICAL MANHOLE/VAULT	SS	SANITARY SEWER
EMP	ELECTRICAL METER PEDESTAL	SSMH	SANITARY SEWER MANHOLE
EP	EDGE OF PAVEMENT	STA	STATION
EX, EXIST	ELECTRICAL PULLBOX	STD	STANDARD
FE	FLANGE END	STL	STEEL
FG	FINISHED GROUND	SW, SDWK	SIDEWALK
FS	FINISHED SURFACE	TC	TOP OF CURB
FTG	FOOTING	TCE	TEMPORARY CONSTRUCTION EASEMENT
G, GAS	GAS	TRANS	TRANSITION
GB	GRADE BREAK	TS	TRAFFIC SIGNAL
GTR	GUTTER	TSC	TRAFFIC SIGNAL CONTROLLER
GV	GATE VALVE	TSP	TRAFFIC SIGNAL POLE
HH	HAND HOLE	TSPB	TRAFFIC SIGNAL PULL BOX
HP	HIGH PRESSURE	TYP	TYPICAL
ICV	IRRIGATION CONTROL VALVE	UCI	UNIVERSITY OF CALIFORNIA, IRVINE
IRWD	IRVINE RANCH WATER DISTRICT	ULT	ULTIMATE
LD	LOCAL DEPRESSION	W	WATER
LT	LEFT	WIF	WROUGHT IRON FENCE
MAX	MAXIMUM	W'LY	WESTERLY
MBGR	METAL BEAM GUARD RAIL	WM	WATER METER
NAP	NOT A PART	WMH	WATER MANHOLE
N'LY	NORTHERLY	WV	WATER VALVE

*NOTE:
ALL OTHER ABBREVIATIONS ARE DEFINED IN CALTRANS STANDARD PLANS A10A, A10B AND SECTION 1-3.2 OF THE "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

BENCHMARKS

VERTICAL DATUM: ORANGE COUNTY PUBLIC WORKS NAVD-88
BENCH MARK: 3FF-11-99
ELEVATION: 28.710 (YEAR LEVELED: 1999)

BASIS OF BEARINGS

HORIZONTAL DATUM: NAD-83 (NSRS 2007) EPOCH: 2007.00
PROJECTION: CCS-83 ZONE: 6 UNITS: US SURVEY FEET (US FT)
COMBINED GRID FACTOR: 0.99997359 CALCULATED AT: CP-107 NORTHING 2184163.63 US FT, EASTING 6073576.05 US FT, ELEVATION 26.55 US FT
MAPPING ANGLE: -0-52-52.96 CALCULATED AT: CP-107 NORTHING 2184163.63 US FT, EASTING 6073576.05 US FT

NOTES:
1. DISTANCES INVERSED FROM COORDINATES ARE GRID. TO OBTAIN APPROXIMATE GROUND DISTANCES DIVIDE BY THE COMBINED GRID FACTOR.
2. THE VALUES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) FOR STATIONS USED ARE:

STATION	LATITUDE	LONGITUDE	&LAT(1σ)	&LONG(1σ)
OEOC	33-45-57.075479	-117-44-38.836680	0.0012m	0.00111m
TRAK	33-37-04.552726	-117-48-12.315528	0.00105m	0.00157m
WHYT	33-40-28.152253	-117-38-36.396318	0.00076m	0.00085m

UTILITY AND AGENCY INDEX

IRVINE RANCH WATER DISTRICT (MAIN OFFICE)	949-453-5300
IRVINE RANCH WATER DISTRICT (OPERATIONS), MATT VELARDAS	949-453-5761
IRVINE RANCH WATER DISTRICT (ENGINEERING), MALCOM CORTEZ	949-453-5854
IRVINE RANCH WATER DISTRICT (OPERATIONS), RORY MOORE	949-453-5737
IRVINE RANCH WATER DISTRICT (INSPECTION), MIKE JACK	949-453-5615
SOUTHERN CALIFORNIA GAS COMPANY (SCG)	714-634-3785
PACIFIC BELL (AT&T)	714-259-4449
SOUTHERN CALIFORNIA EDISON COMPANY (SCE)	949-458-4443
COMCAST CABLE VISION	714-338-2000
COX COMMUNICATIONS	949-546-2000
UNDERGROUND SERVICE ALERT (USA)	800-227-2600

CONSTRUCTION NOTES

		QUANTITY
P	PROTECT EXISTING IMPROVEMENT IN PLACE	
RM	REMOVE AND DISPOSE OF EXISTING IMPROVEMENT	
RR	REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR	
A	ADJUST EXISTING MANHOLE TO GRADE PER IRWD STD DWG S-1	7 EA
1	REMOVE EXISTING FIRE HYDRANT ASSEMBLY (RETURN TO IRWD), CONCRETE PAD, AND HYDRANT BURY	1 EA
2	INSTALL NEW FIRE HYDRANT ASSEMBLY PER IRWD STD DWG W-8, CONDITION 3 AND CUT IN TEE FOR ACP PER IRWD STD DWG W-19	1 EA
3	INSTALL NEW 8" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3	2 EA
4A	INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 1	1 EA
4B	INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 2	2 EA
4C	INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3	5 EA
4D	INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3 (MODIFIED)	2 EA
5	INSTALL NEW 4" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3. ONLY ONE ISOLATION VALVE IS TO BE REMOVED AND REPLACED	4 EA
6	DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES	21 EA
7	REMOVE EXISTING BOX AND INSTALL NEW TRAFFIC RATED METER BOX SIZED FOR 2" METER WITH METAL LID	1 EA
8	CONSTRUCT 6" REINFORCED PCC PAD (#4 BARS @ 12" O.C., GRID PATTERN) OVER 6" SAND (PIPE PROTECTION)	70 SF
9	REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22	26 EA
10	INSTALL NEW BRASS INSULATING BALL CORP STOP ON EXISTING SADDLE PER IRWD STD DWG W-3	3 EA
11	CONSTRUCT NEW 16" (¼" THICK) CML&C STEEL DOMESTIC WATER PIPELINE (FLANGED SPOOL, FE x FE)	50 LF
12	CONSTRUCT "B-6" CURB ONLY PER CITY OF IRVINE STD 200	12 LF
13	ABANDON 6" WATER LATERAL IN PLACE, FILL WITH CEMENT SLURRY, BLIND FLANGE OPEN ENDS	1 EA
14	REMOVE EXISTING VALVE (RETURN TO IRWD INSPECTOR) AND INSTALL NEW BFV VALVE IN KIND PER IRWD STD DWG W-22	4 EA
15	INSTALL NEW BRASS PLUG ON EXISTING SADDLE	1 EA
16	INSTALL NEW VALVE (SIZE AND TYPE CALLED OUT ON PLANS) PER IRWD STD DWG W-22 AND ADJUST TO GRADE	3 EA
17	REMOVE EXISTING VALVE AND INSTALL NEW 6" BLIND FLANGE AND THRUST BLOCK ON EXISTING TEE	2 EA
18	REMOVE EXISTING CORP STOP, INSTALL BRASS PLUG ON EXISTING CONNECTION, AND CONNECT NEW AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11	5 EA
19	REMOVE EXISTING VALVE AND INSTALL NEW FLANGED SPOOL (2' MINIMUM LENGTH)	1 EA

INDEX OF DRAWINGS

SHEET	DESCRIPTION
IRWD-1, 80	LOCATION MAP, LEGEND, NOTES, AND INDICIES
IRWD-2, 81	NOTES, MANHOLE, VALVE, AND CATHODIC PROTECTION TEST STATION IMPROVEMENTS
IRWD-3, 82	RELOCATION DETAILS, STA 118+00 TO STA 122+00
IRWD-4, 83	RELOCATION DETAILS, STA 122+00 TO STA 132+00
IRWD-5, 84	RELOCATION DETAILS, STA 132+00 TO STA 142+00
IRWD-6, 85	RELOCATION DETAILS, STA 142+00 TO STA 152+00
IRWD-7, 86	RELOCATION DETAILS, STA 152+00 TO STA 162+00
IRWD-8, 87	RELOCATION DETAILS, STA 162+00 TO STA 169+00

UNAUTHORIZED CHANGES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED BY THE PREPARER OF THESE PLANS, AND THE ENGINEER-IN-CHARGE.

811 Know what's below. Call before you dig.

NOTICE TO CONTRACTOR

PURSUANT TO ASSEMBLY BILL 3019, AND SUBSEQUENT STATE LAW, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING ARE PERFORMED:

1. THE CONTRACTOR AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D. # FROM UNDERGROUND SERVICE ALERT (1-800-422-4133) AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF EXCAVATION.

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170

CODE 6788

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

RANDALL G. BERRY RCE #44642 7/7/17 DATE

CRAIG E. SIBERT — HARRIS PROJECT ENGINEER — R.C.E. 70041 — 7/7/17 DATE
RANDALL G. BERRY — HARRIS PROJECT MANAGER — R.C.E. 44642 — 7/7/17 DATE
MALCOM CORTEZ — IRWD PRINCIPAL ENGINEER — R.C.E. 52968 — 7/13/17 DATE

IRVINE RANCH WATER DISTRICT

IRVINE RANCH WATER DISTRICT
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION
PROJECT NO. 7170

LOCATION MAP, LEGEND, NOTES, AND INDICES

SHEET IRWD-1
80 OF 87 SHEETS

NOVEMBER 2016

IRWD STANDARD WATER NOTES

A. THE WATER SYSTEM IS TO BE INSTALLED BY THE CONTRACTOR. ALL WATER SYSTEM WORK SHALL CONFORM TO THE DISTRICT'S "PROCEDURAL GUIDELINES" AND "CONSTRUCTION MANUAL", AS LAST REVISED.

B. A PRE-CONSTRUCTION CONFERENCE OF REPRESENTATIVES FROM AFFECTED AGENCIES AND THE CONTRACTOR SHALL BE HELD ON THE JOB SITE AT LEAST 48 HOURS PRIOR TO START OF WORK.

C. THE DISTRICT ENGINEERING OFFICE SHALL BE CALLED FOR INSPECTION FOURTY-EIGHT (48) HOURS BEFORE START OF WORK AT (949) 453-5615 OR (949) 453-5300

D. THE WATER SYSTEM IS TO BE STAKED BY THE ENGINEER AT A MINIMUM 50-FOOT STATIONING IF THERE ARE NO CURBS. SEE IRWD SPECIFICATION SECTION 01100 FOR CONSTRUCTION SURVEY STAKING.

E. WATER METERS SHALL NOT BE LOCATED WITHIN A DRIVEWAY OR SIDEWALK. ALL WATER SERVICE LATERALS SHALL BE CONSTRUCTED PERPENDICULAR TO THE WATER MAIN WITHOUT BENDS OR ANGLES.

F. ALL MAIN LINE VALVES SHALL BE MAINTAINED SO AS TO BE ACCESSIBLE DURING TRACT DEVELOPMENT AND CONSTRUCTION. ALL VALVE STEM TOPS HAVING OVER 60-INCHES OF COVER WILL REQUIRE AN EXTENSION MEETING DISTRICT STANDARDS.

G. ALL FIRE HYDRANTS SHALL BE SET WITH THE BOTTOM FLANGE 4-INCHES ABOVE THE CONCRETE PAD OR SIDEWALK USING ONE SCORED-SPOOL AS INDICATED IN THE CONSTRUCTION MANUAL AND SHALL BE LOCATED A A MINIMUM OF 3 FEET FROM THE ECR OR BCR AT INTERSECTION.

H. ALL WATER MAINS 4-INCHES THROUGH 12-INCHES SHALL BE SDR-14 OR THICKER AND SHALL NO BE RATED LESS THAN PRESSURE CLASS 200, AWWA C-900 PVC, UNLESS OTHERWISE APPROVED BY THE DISTRICT.

I. NO "HOT TAPS" OR OTHER TIE IN CONNECTIONS SHALL BE MADE TO EXISTING DISTRICT WATER MAINS PRIOR TO CONDUCTING AND PASSING AN APPROVED PRESSURE TEST AND A BACTERIOLOGICAL TEST ON THE NEW WATER DISTRIBUTION SYSTEM.

J. TAPPING SLEEVES SHALL BE PRESSURE TESTED IN AN APPROVED MANNER IN THE FIELD, IN THE PRESENCE OF THE DISTRICT REPRESENTATIVE, PRIOR TO TAPPING THE MAIN LINE. TAPPING OF THE MAIN LINE SHALL NOT PROCEED UNLESS A DISTRICT REPRESENTATIVE IS PRESENT. SIZE ON SIZE TAPS OF WATER MAINS ARE NOT ALLOWED.

K. WHERE METERS AND METER BOXES ARE LOCATED WITHIN SLOPES, THE ANGLE METER STOPS SHALL BE LOCATED SUCH THAT THE METERS AND BOXES WILL BE PARALLEL AND FLUSH, RESPECTIVELY, WITHIN THE FINISHED SURFACE. WHEREVER THE SURROUNDING GRADE EXCEEDS EIGHT (8%) PERCENT, OR IN THE OPINION OF THE DISTRICT REPRESENTATIVE, THE ADJACENT SLOPE IS TOO GREAT, A SMALL RETAINING WALL, CLEAR OF THE METER BOX, SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE DISTRICT REPRESENTATIVE.

L. CURBS SHALL BE INSCRIBED WITH THE LETTER "W" INDICATING LOCATIONS OF ALL DOMESTIC WATER SERVICES. LETTER INSCRIPTIONS SHALL BE MADE USING A 4-INCH POWER TOOL WHEEL GRINDER.

M. INDIVIDUAL PRESSURE REGULATORS ARE REQUIRED BY THE UNIFORM PLUMBING CODE IF AVERAGE STATIC PRESSURE IN THE MAIN IS 80PSI OR MORE.

N. CURBS SHALL BE INSCRIBED WITH TIE DOWNS FOR ALL VALVE LOCATIONS. LETTER INSCRIPTIONS SHALL BE MADE USING A 4-INCH POWER TOOL WHEEL GRINDER.

O. THE CONTRACTOR SHALL EXPOSE ALL POINTS OF CONNECTION TO THE EXISTING DOMESTIC WATER SYSTEM FOR VERIFICATION OF HORIZONTAL AND VERTICAL LOCATION BEFORE CONSTRUCTION.

P. FINAL INSPECTION FOR WATERLINES MUST INCLUDE WATER SAMPLES THAT WILL BE TESTED FOR THE PRESENCE OF BACTERIA, CONDUCTIVITY, TURBIDITY, AND ODOR. THE TURBIDITY MUST BE LESS THAN 2.5 NTU AND THE ODOR MUST BE LESS THAN 1.0 TON (THRESHOLD ODOR NUMBER), NOT TO INCLUDE CHLORINE ODOR, TO BE ACCEPTABLE. TWO (2) CONSECUTIVE "PASSING" SAMPLES ARE REQUIRED FOR ACCEPTANCE.

Q. THE CONTRACTOR WORKING ON IRWD WATERLINES MUST HAVE A C-34 LICENSE ISSUED BY STATE CONTRACTOR'S LICENSE BOARD OR CLASS "A" GENERAL CONTRACTORS LICENSE (WITH SPECIAL APPROVAL OF THE DISTRICT, BASED UPON ACTUAL WATER AND SEWER PIPELINE CONSTRUCTION EXPERIENCE).

R. CONTRACTOR SHALL OBTAIN AND SHOW PROOF OF A CONSTRUCTION DEWATERING PERMIT FROM THE STATE OF CALIFORNIA, REGIONAL WATER QUALITY CONTROL BOARD PRIOR TO THE START OF CONSTRUCTION.

S. ALL BUTTERFLY VALVES 12-INCHES IN DIAMETER AND LARGER SHALL BE FLANGED AND SHALL BE BI-DIRECTIONALLY TESTED WITH THE OPERATOR INSTALLED IN ACCORDANCE WITH THE DISTRICT'S REQUIREMENTS OUTLINED IN THE CONSTRUCTION MANUAL.

IRWD STANDARD SEWER NOTES

A. ALL SEWER WORK SHALL CONFORM TO THE DISTRICT'S "PROCEDURAL GUIDELINES AND GENERAL REQUIREMENTS" AND "CONSTRUCTION MANUAL", AS LAST REVISED.

B. THE SEWER CONTRACTOR SHALL HAVE A COPY OF THE DISTRICT'S CONSTRUCTION MANUAL ON THE JOB.

C. THE CONTRACTOR SHALL OBTAIN A CITY OR COUNTY PERMIT FOR WORK DONE ON PUBLIC RIGHT-OF-WAY.

D. THE DISTRICT ENGINEERING OFFICE SHALL BE CALLED FOR INSPECTION FOURTY-EIGHT (48) HOURS BEFORE START OF WORK AT (949) 453-5615 OR (949) 453-5300

E. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD 48 HOURS BEFORE STARTING CONSTRUCTION WORK.

F. THE CONTRACTOR SHALL EXPOSE ALL JOIN POINTS TO THE EXISTING SEWER SYSTEM FOR VERIFICATION OF LOCATION AND ELEVATION BEFORE CONSTRUCTION.

G. ALL LATERALS ARE TO BE STAKED BY A SURVEYOR BEFORE TRENCHING AND A COMPLETE SET OF CUT SHEETS SUPPLIED TO THE DISTRICT REPRESENTATIVE.

H. ALL SEWER MANHOLE LIDS ARE TO HAVE "IRWD" CAST THEREON AS SHOWN IN THE DISTRICT STANDARD DRAWINGS. VALVE CAN LIDS FOR SEWER BLOW OFFS TO BE PAINTED GREEN.

I. THE DISTRICT WILL INSPECT AND TEST THE SEWER COLLECTION SYSTEM AND LATERAL SEWERS TO THE LATERAL CONNECTION AT PROPERTY LINE CLEAN-OUT, TERMINAL CLEAN-OUT OR MANHOLE. PRIVATELY OWNED SEWER LATERALS, HOUSE LATERALS OR BUILDING SEWER LATERALS FROM THE PROPERTY LINE CLEAN-OUT ONTO PRIVATE PROPERTY WILL BE INSPECTED AND TESTED BY THE APPROPRIATE CITY OR COUNTY BUILDING AGENCY.

J. INFILTRATION AND AIR TESTING OF SEWER LINES SHALL BE IN ACCORDANCE WITH THE DISTRICT'S "PROCEDURAL GUIDELINES AND GENERAL DESIGN REQUIREMENTS" AND "CONSTRUCTION MANUAL", AS LAST REVISED.

K. ALL SEWER LINES SHALL BE CLEANED VIA "HYDRO-JET CLEANER" OR "WAYNE BALL" IN THE PRESENCE OF THE DISTRICT REPRESENTATIVE BEFORE COMPLETION OF ALL LEAKAGE TESTS.

L. PIPELINE LEAKAGE TESTS SHALL BE MADE IN THE PRESENCE OF THE DISTRICT REPRESENTATIVE ONLY AFTER BACKFILL HAS BEEN COMPLETED, COMPACTION TESTS ON BACKFILL HAVE BEEN MADE, AND THE BACKFILL HAS BEEN ACCEPTED BY THE DISTRICT REPRESENTATIVE AND HAS RECEIVED WRITTEN CERTIFICATION FROM THE GEOTECHNICAL ENGINEERING.

M. ALL SEWER MAIN LINES SHALL BE INSPECTED BY THE DISTRICT AND THEN SHALL BE CCTV VIDEO INSPECTED (BY IRWD FORCES OR AN APPROVED PRIVATE CONTRACT COMPANY UNDER THE OBSERVATION OF THE DISTRICT REPRESENTATIVE) USING A HIGH-RESOLUTION CLOSED CIRCUIT TELEVISION SYSTEM. A DVD VIDEO RECORDING SHALL BE MADE OF THE INSPECTION AND PROVIDED TO THE DISTRICT REPRESENTATIVE.

N. THE CONTRACTOR IS TO PROVIDE THE DISTRICT WITH AN AS-BUILT SET OF CONSTRUCTION PLANS.

O. BEFORE FINAL ACCEPTANCE, THE DEVELOPER'S ENGINEER SIGNING THE PLANS SHALL FURNISH THE DISTRICT WITH A SET OF AS-BUILT MYLARS, A PDF SCAN OF THE RED-LINE MARK-UP AND AN AS-BUILT CAD FILE OF THE SEWER PLAN.

P. CURBS SHALL BE INSCRIBED WITH AN "S" INDICATING LOCATIONS OF ALL SEWER LATERALS USING A 4-INCH POWER TOOL WHEEL-GRINDER.

Q. CURBS SHALL BE INSCRIBED WITH TIE DOWNS FOR ALL MANHOLE LOCATIONS USING A 4-INCH POWER TOOL WHEEL GRINDER.

R. THE CONTRACTOR WORKING ON IRWD SEWER MAINS MUST HAVE A C-34 LICENSE OR CLASS A CONTRACTORS LICENSE.

IRWD STANDARD RECYCLED WATER NOTES

A. ALL OFF-SITE RECYCLED WATER SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE POTABLE WATER SYSTEMS.

B. RECYCLED WATER PIPE SHALL BE PURPLE PVC C-900 PIPE MARKED AS REQUIRED BY IRWD STANDARDS TO IDENTIFY IT AS RECYCLED WATER. CML&C STEEL PIPE OR DIP MAY BE USED WITH APPROVAL OF IRWD BUT IT MUST BE MARKED WITH PURPLE MARKING TAPE.

C. ALL 1-INCH AND 2-INCH COPPER SERVICES SHALL BE WRAPPED CONTINUOUSLY WITH PURPLE MARKING TAPE FROM END TO END.

CONSTRUCTION NOTES

1. CONTRACTOR SHALL MAINTAIN THE WORK AREAS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION OVER THE AREA. STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CLEAN-UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. CONTRACTOR SHALL HAVE A FUNCTIONAL STREET SWEEPER AND WATER TRUCK AVAILABLE AT ALL TIMES DURING CONSTRUCTION WORK HOURS. CITY OF IRVINE STANDARDS FOR ASPHALT CEMENT CONCRETE AND CITY OF IRVINE STANDARD CONDITIONS SHALL APPLY.
2. AT THE END OF EACH DAY, THE CONTRACTOR SHALL EITHER BACKFILL AND PLACE BASE PAVEMENT OR STEEL PLATE HIS EXCAVATION SO HE CAN OPEN UP ALL TRAVEL LANES TO TRAFFIC. STEEL PLATES SHALL BE TACKED DOWN OR SPIKED AND TEMPORARY AC PLACED AS REQUIRED BY THE REGULATORY AGENCY. STEEL PLATES LOCATED WITHIN A TRAVELED WAY SHALL BE LIMITED TO A MAXIMUM OF 500 FEET. NO PLATES ARE ALLOWED OVER THE WEEKEND. STEEL PLATES SHALL BE RECESSED.
3. AT THE END OF EACH WORKING DAY AND AT TIMES WHEN CONSTRUCTION OPERATIONS ARE SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT, VEHICLES, MATERIAL, TRAFFIC CONTROL DEVICES, STOCKPILE OR ANY OTHER FORM OF OBSTRUCTION FROM THE STREET RIGHT-OF-WAY.
4. ALL PCC AND AC PAVEMENT REMOVALS SHALL BE OUTLINED TO NECESSARY WORKING LIMITS AND SAWCUT PRIOR TO THE REMOVAL. ALL DEBRIS CREATED BY THE REMOVAL OPERATIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN A MANNER AND AT A LOCATION ACCEPTABLE TO ALL JURISDICTIONAL AGENCIES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE. SEE IRWD PROJECT MANUAL.
6. ALL FLANGED PIPE JOINTS SHALL BE JOINED UTILIZING TYPE 316 STAINLESS STEEL NUTS, WASHERS, AND HEX-HEAD BOLTS. THREADED PARTS SHALL BE LIBERALLY COATED WITH AN APPROVED ANTI-SEIZE COMPOUND. GASKETS SHALL BE FULL-FACED, CLOTH REINFORCED BUNA-N-RUBBER.
7. ALL FLANGED CONNECTIONS BURIED UNDERGROUND SHALL BE COATED WITH TWO (2) COATS OF 10 MILS EACH OF "3M" E.C. 244 OR APPROVED EQUAL AFTER INSTALLATION; INCLUDING NUTS, BOLTS, AND FLANGES.
8. CONTRACTOR SHALL PERFORM POTHOLE OPERATIONS TO VERIFY LOCATIONS OF EXISTING UTILITIES AND SUBMIT INFORMATION TO DISTRICT FOR REVIEW, PRIOR TO SUBMITTAL OF PIPE SHOP DRAWINGS. SHOULD ANY CONFLICTS BE NOTED, AND SHOULD PIPE ALIGNMENT NEED REVISIONS, REVISIONS SHALL BE RELEASED WITHIN 14 DAYS OF POTHOLE INFORMATION SUBMITTAL. REPRESENTATIVES FROM EACH UTILITY COMPANY MUST BE NOTIFIED 48 HOURS PRIOR TO THE FIELD VERIFICATION.
9. THE CITY OF IRVINE ENCROACHMENT PERMIT STANDARD CONDITIONS APPLY TO THIS PROJECT.
10. CONTRACTOR SHALL RETURN ALL WATER AND RECYCLED WATER BLOW OFFS, AIR/VACS, HYDRANTS, METERS, AND VALVES TO IRWD.

VALVE, MANHOLE, AND CP TEST STATION IMPROVEMENTS

C.N.	ITEM DESCRIPTION	BASE MAP LOCATION	TASK
	CP TEST STATION	STATION 118+42	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 118+45	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 118+71	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 121+30	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 126+53	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 126+70	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 131+60	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 132+70	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 133+90	PROTECT IN PLACE, CONNECTED TO 24" RW.
	CP TEST STATION	STATION 136+10	PROTECT IN PLACE, CONNECTED TO 16" DW.
	CP TEST STATION	STATION 136+49	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
(6)	CP TEST STATION	STATION 141+31	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 141+60	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 145+60	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 146+79	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 150+95	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 151+55	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 155+70	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 157+33	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 160+62	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 24" RW.
	CP TEST STATION	STATION 161+83	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 166+10	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 16" DW.
	CP TEST STATION	STATION 167+75	REMOVE EXISTING. INSTALL NEW BEHIND NORTH CURB. NEW WIRES TO 12" RW LATERAL.
	WATER VALVE	STATION 118+00	ADJUST TO GRADE. VALVE IS ON 16" DW.
	WATER VALVE	STATION 118+40	ADJUST TO GRADE. VALVE IS ON 16" DW.
	WATER VALVE	STATION 118+70	ADJUST TO GRADE. VALVE IS ON 24" RW.
	WATER VALVE	STATION 120+60	ADJUST TO GRADE. VALVE IS ON 24" RW.
	WATER VALVE	STATION 120+62	ADJUST TO GRADE. VALVE IS ON 12" RW LATERAL.
	WATER VALVE	STATION 121+75	ADJUST TO GRADE. VALVE IS ON 16" DW.
	SEWER VALVE	STATION 127+80	ADJUST VALVE ON 8" PVC LATERAL FROM 16" SFM BLOWOFF
	WATER VALVE	STATION 127+85	ADJUST TO GRADE. VALVE IS ON 16" DW.
	WATER VALVE	STATION 127+95	ADJUST TO GRADE. VALVE IS ON 24" RW.
	WATER VALVE	STATION 134+35	ADJUST TO GRADE. VALVE IS ON 12" RW.
	WATER VALVE	STATION 134+37	ADJUST TO GRADE. VALVE IS ON 12" RW.
(9)	WATER VALVE	STATION 134+55	ADJUST TO GRADE. VALVE IS ON 12 DW.
	WATER VALVE	STATION 134+62	ADJUST TO GRADE. VALVE IS ON 24" RW.
	WATER VALVE	STATION 135+04	ADJUST TO GRADE. VALVE IS ON 16" RW.
	WATER VALVE	STATION 135+40	ADJUST TO GRADE. VALVE IS ON 8" RW.
	WATER VALVE	STATION 154+22	ADJUST TO GRADE. VALVE IS ON 12" RW.
	WATER VALVE	STATION 154+75	ADJUST TO GRADE. VALVE IS ON 12" RW.
	WATER VALVE	STATION 154+89	ADJUST TO GRADE. VALVE IS ON 16" RW.
	WATER VALVE	STATION 156+83	ADJUST TO GRADE. VALVE IS ON 16" DW.
	WATER VALVE	STATION 158+41	ADJUST TO GRADE. VALVE IS ON 24" RW.
	SEWER VALVE	STATION 158+78	ADJUST VALVE ON 8" DIP SERVICE FROM 16" SFM BLOW OFF.
	WATER VALVE x3	STATION 166+85	ADJUST TO GRADE. VALVES ARE ON 16" DW.
	WATER VALVE	STATION 167+30	ADJUST TO GRADE. VALVE IS ON 16" RW.
	WATER VALVE	STATION 167+75	ADJUST TO GRADE. VALVE IS ON 12" RW LATERAL.
	WATER VALVE	STATION 134+22	REMOVE AND REPLACE IN KIND. ADJUST TO GRADE.
(14)	WATER VALVE	STATION 167+71	REMOVE AND REPLACE IN KIND. ADJUST TO GRADE.
	WATER VALVE	STATION 167+72	REMOVE AND REPLACE IN KIND. ADJUST TO GRADE.
	WATER VALVE	STATION 167+75	REMOVE AND REPLACE IN KIND. ADJUST TO GRADE.
	WATER VALVE	STATION 120+60	NEW VALVE INSTALLATION ON 12" RW LATERAL.
(16)	WATER VALVE	STATION 137+45	NEW VALVE INSTALLATION ON 12" RW.
	SEWER VALVE	STATION 158+78	NEW VALVE INSTALLATION ON 8" DIP LATERAL FROM 16" SFM.
	SEWER MANHOLE	STATION 126+62	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.
	RECYCLED WATER MANHOLE	STATION 154+82	ADJUST TO GRADE. MANHOLE IS ON 12" RW.
	SEWER MANHOLE	STATION 165+42	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.
(A)	SEWER MANHOLE	STATION 166+63	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.
	SEWER MANHOLE	STATION 166+68	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.
	SEWER MANHOLE	STATION 167+19	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.
	SEWER MANHOLE	STATION 168+08	ADJUST TO GRADE. MANHOLE IS ON 15" SEWER.

NOTES

SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS

CONSTRUCTION NOTES

(A) ADJUST EXISTING MANHOLE TO GRADE PER IRWD STD DWG S-1

(6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES

(9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22

(14) REMOVE EXISTING VALVE (RETURN TO IRWD INSPECTOR) AND INSTALL NEW BFV VALVE IN KIND PER IRWD STD DWG W-22

(16) INSTALL NEW VALVE (SIZE AND TYPE CALLED OUT ON PLANS) PER IRWD STD DWG W-22 AND ADJUST TO GRADE

NOTICE TO CONTRACTOR

PURSUANT TO ASSEMBLY BILL 3019, AND SUBSEQUENT STATE LAW, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING ARE PERFORMED:

1. THE CONTRACTOR AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D. # FROM UNDERGROUND SERVICE ALERT (1-800-422-4133) AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF EXCAVATION.

811 Know what's below. Call before you dig.

UNAUTHORIZED CHANGES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED BY THE PREPARER OF THESE PLANS, AND THE ENGINEER-IN-CHARGE.

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 - Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
RANDALL G. BERRY RCE #44642 DATE 7/7/17

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

CRAIG E. BIEFERT — HARRIS PROJECT ENGINEER — R.C.E. 70041 — DATE 7/7/17
RANDALL G. BERRY — HARRIS PROJECT MANAGER — R.C.E. 44642 — DATE 7/7/17
MALCOM CORTEZ — IRWD PRINCIPAL ENGINEER — R.C.E. 52968 — DATE 7/13/17

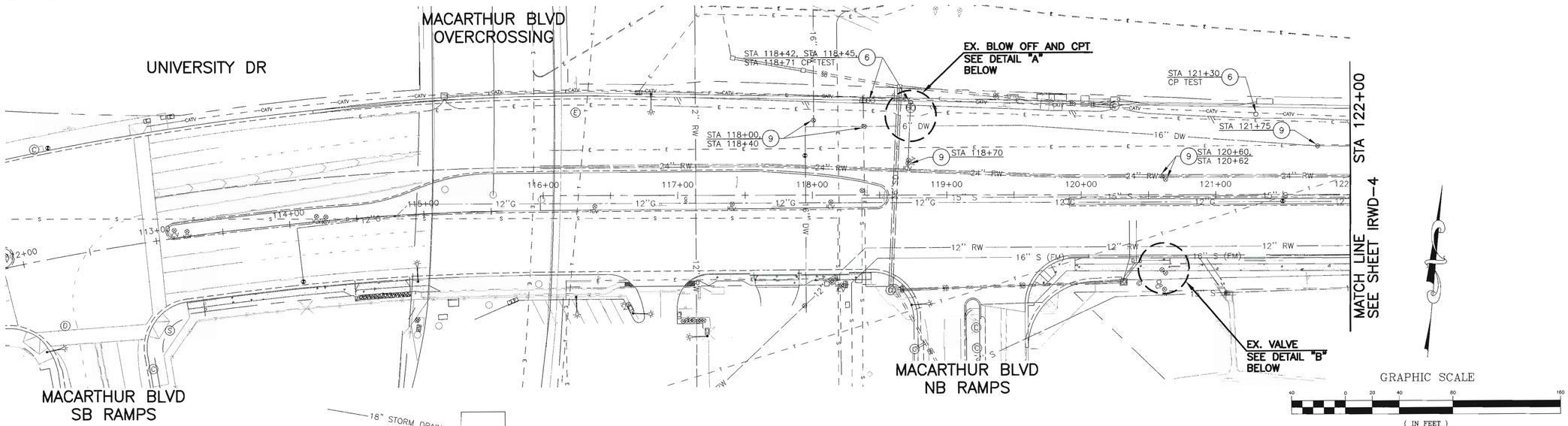
IRVINE RANCH WATER DISTRICT

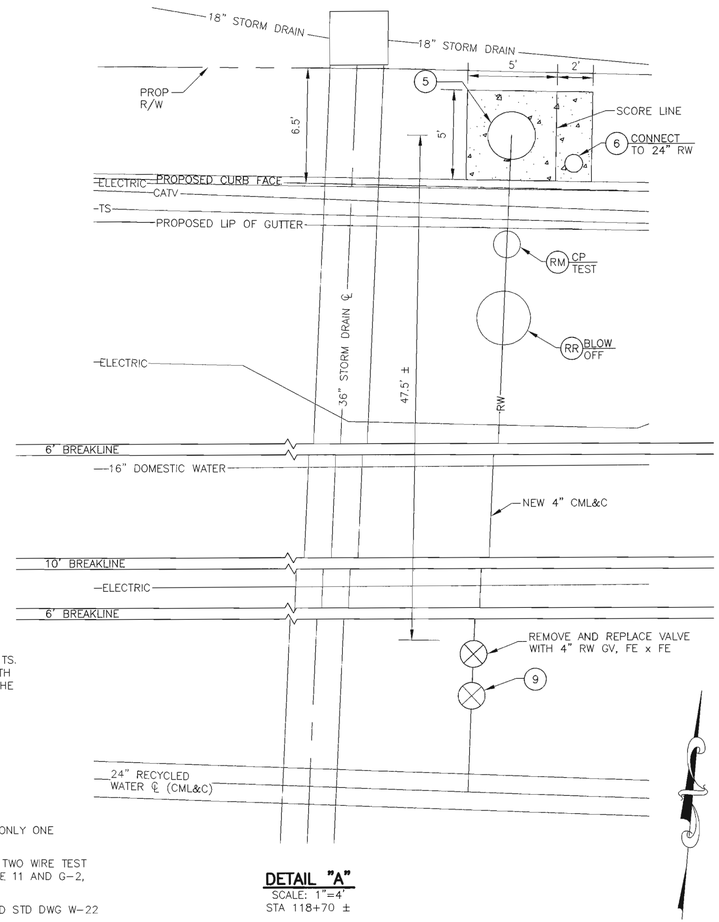
IRVINE RANCH WATER DISTRICT
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION
PROJECT NO. 7170

NOTES, MANHOLE, VALVE, AND CATHODIC PROTECTION TEST STATION IMPROVEMENTS

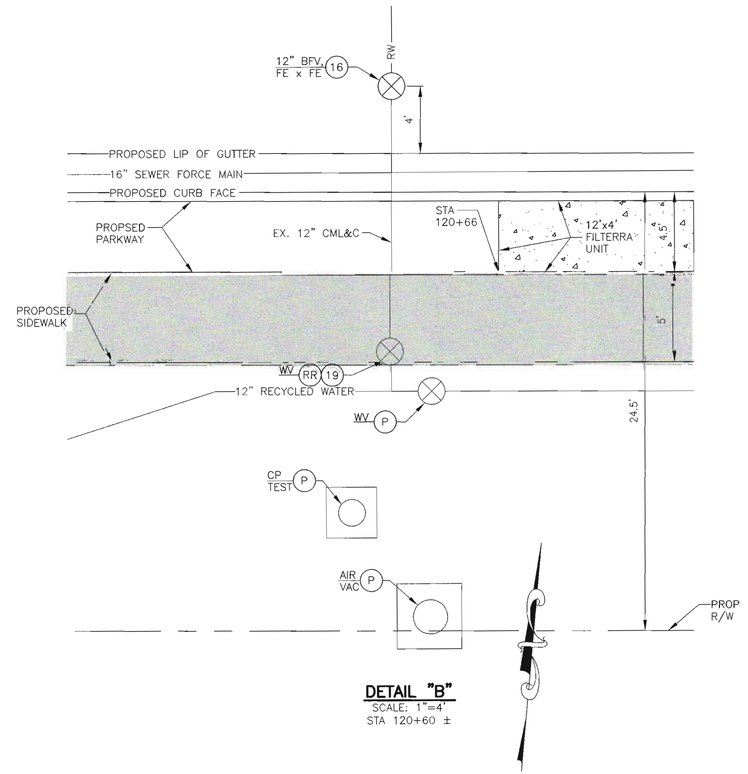
SHEET IRWD-2
81 OF 87 SHEETS

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170
CODE 6788
NOVEMBER 2016





DETAIL "A"
SCALE: 1"=4'
STA 118+70 ±



DETAIL "B"
SCALE: 1"=4'
STA 120+60 ±

NOTES

1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE
- (RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT
- (RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR
- (5) INSTALL NEW 4" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3. ONLY ONE ISOLATION VALVE IS TO BE REMOVED AND REPLACED.
- (6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES
- (9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22
- (16) INSTALL NEW VALVE (SIZE AND TYPE CALLED OUT ON PLANS) PER IRWD STD DWG W-22 AND ADJUST TO GRADE
- (19) REMOVE EXISTING VALVE AND INSTALL NEW FLANGED SPOOL (2' MINIMUM LENGTH)

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates.
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995

RANDALL G. BERRY RCE #44642 7/7/17 DATE

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

CRAIG E. SIEFERT — HARRIS PROJECT ENGINEER R.C.E. 70041 — 7/7/17 DATE
RANDALL G. BERRY — IRWD PROJECT MANAGER R.C.E. 44642 — 7/7/17 DATE
MALCOM CORTEZ — IRWD PRINCIPAL ENGINEER R.C.E. 52968 — 7/13/17 DATE

IRVINE RANCH WATER DISTRICT

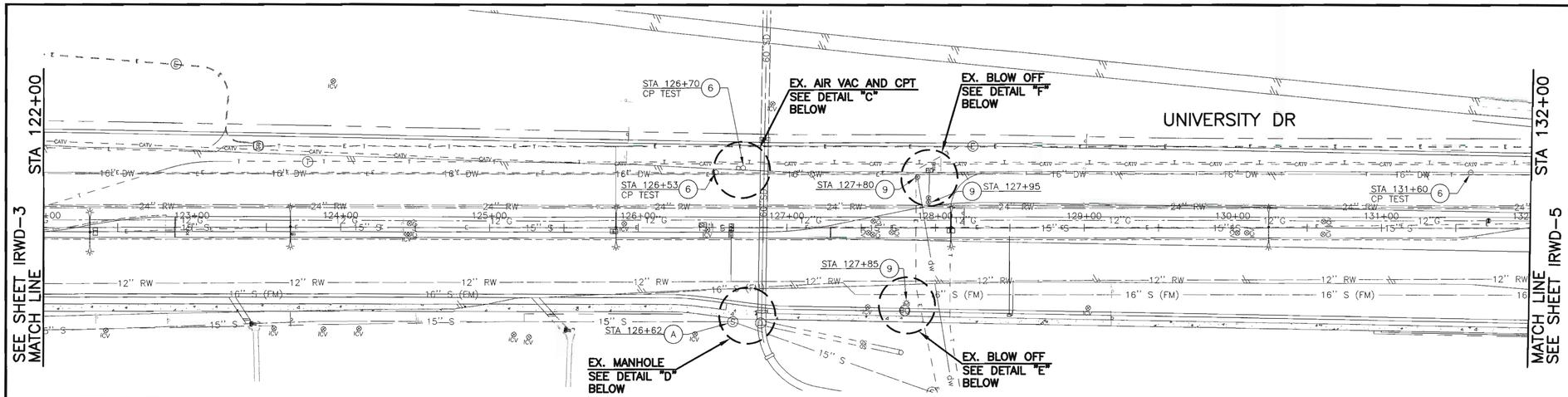
IRVINE RANCH WATER DISTRICT
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION
PROJECT NO. 7170

RELOCATION DETAILS
STA 118+00 TO STA 122+00

SHEET IRWD-3
82 OF 87 SHEETS

CODE 6788

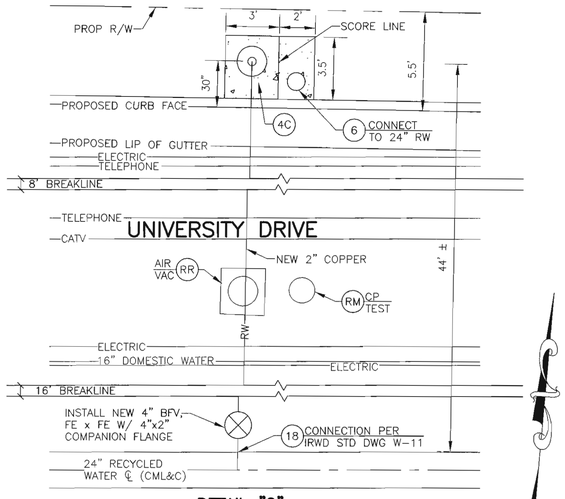
UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170
NOVEMBER 2016



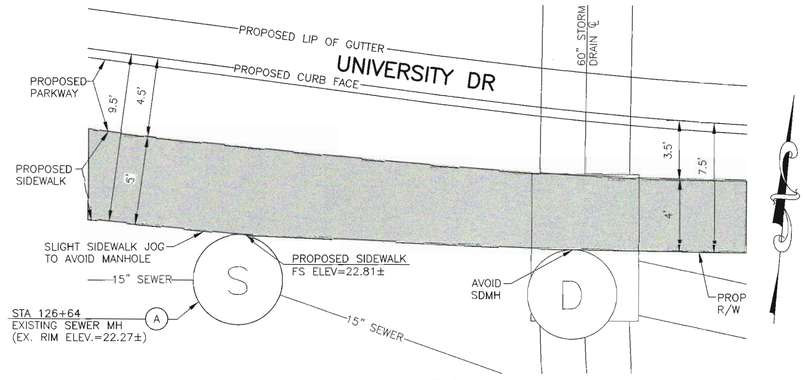
GRAPHIC SCALE

40 0 20 40 80 160

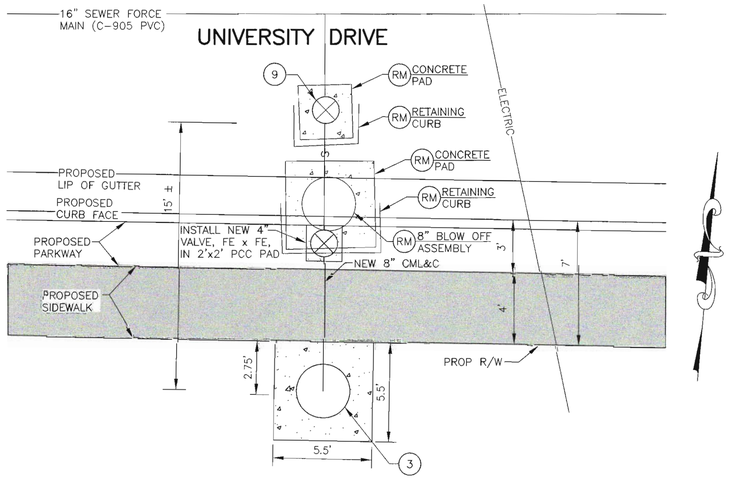
(IN FEET)
1 inch = 40 ft.



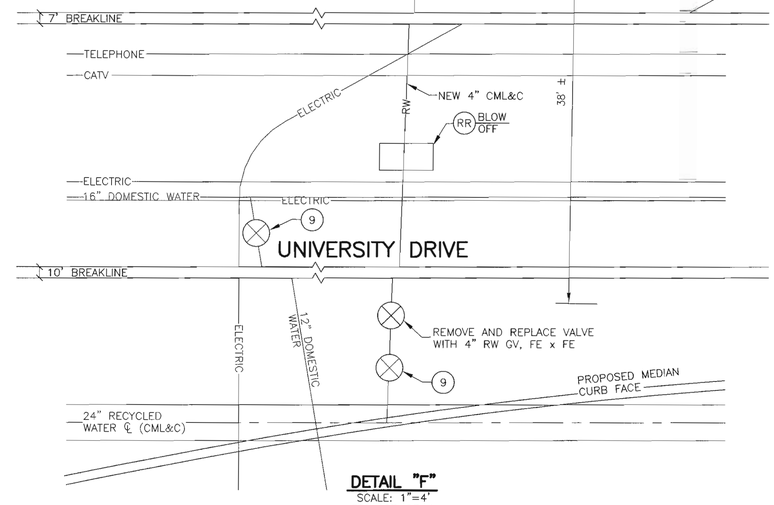
DETAIL "C"
SCALE: 1"=4'
STA 126+65 ±



DETAIL "D"
SCALE: 1"=4'
STA 126+70 ±



DETAIL "E"
SCALE: 1"=4'
STA 127+80 ±



DETAIL "F"
SCALE: 1"=4'
STA 127+95 ±

NOTES

1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

CONSTRUCTION NOTES

- (RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT
- (RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR
- (A) ADJUST EXISTING MANHOLE TO GRADE PER IRWD STD DWG S-1
- (3) INSTALL NEW 8" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD. DWG. W-14, CASE 3
- (4C) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3
- (5) INSTALL 4" NEW BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3. ONLY ONE ISOLATION VALVE IS TO BE REMOVED AND REPLACED.
- (6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES
- (9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22
- (18) REMOVE EXISTING CORP STOP, INSTALL BRASS PLUG ON EXISTING CONNECTION, AND CONNECT NEW AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 • FAX: (949) 655-3995
Randall Berry 7/7/17
RANDALL G. BERRY RCE #44642 DATE

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

Craig E. Shubert — HARRIS PROJECT ENGINEER — R.C.E. 70041 — 7/7/17 DATE
Randall Berry — HARRIS PROJECT MANAGER — RANDALL G. BERRY — R.C.E. 44642 — 7/7/17 DATE
IRWD PRINCIPAL ENGINEER — MALCOM CORTEZ — R.C.E. 52968 — 7/13/17 DATE

IRVINE RANCH WATER DISTRICT

IRVINE RANCH WATER DISTRICT

UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION

PROJECT NO. 7170

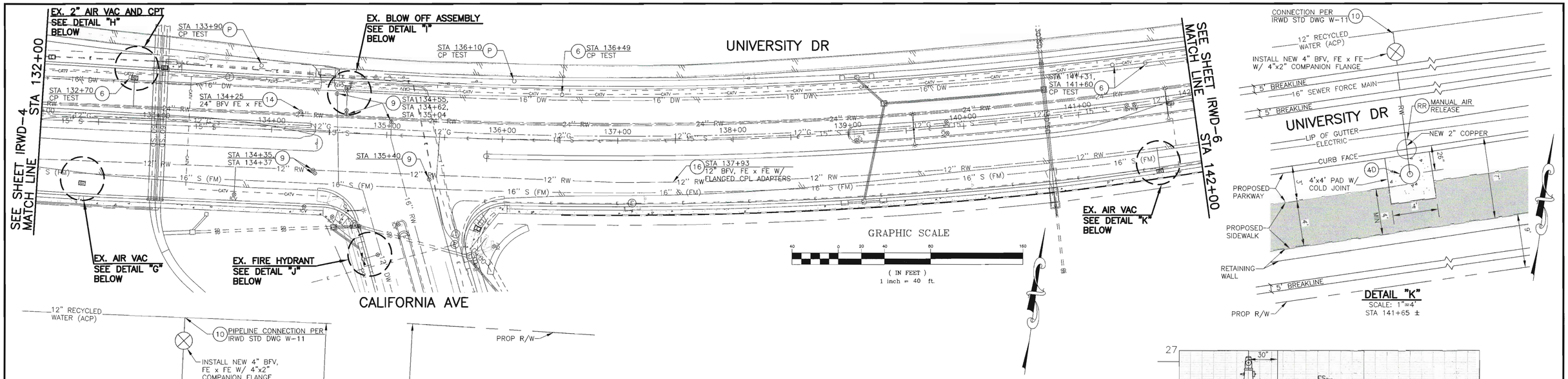
RELOCATION DETAILS
STA 122+00 TO STA 132+00

SHEET
IRWD-4
83 OF 87
SHEETS

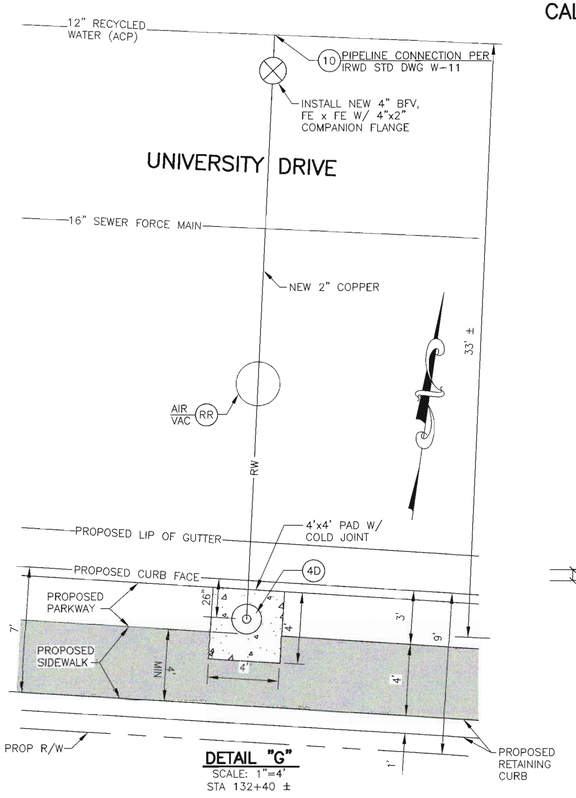
NOVEMBER 2016

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170

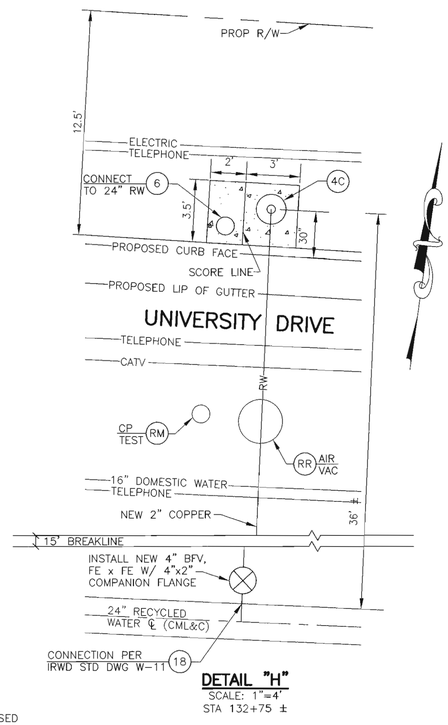
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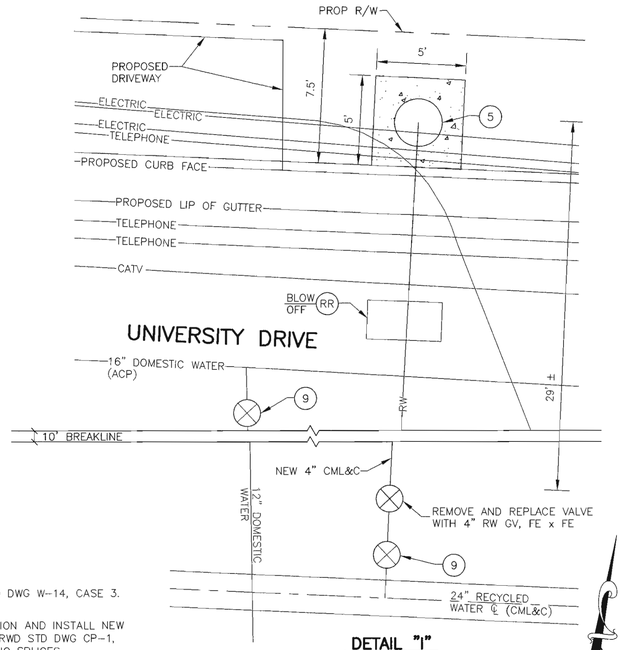
DETAIL "K"
SCALE: 1"=4'
STA 141+65 ±



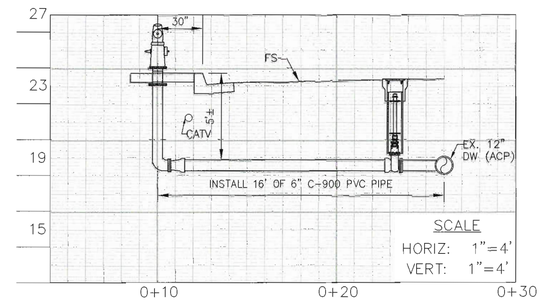
DETAIL "G"
SCALE: 1"=4'
STA 132+40 ±



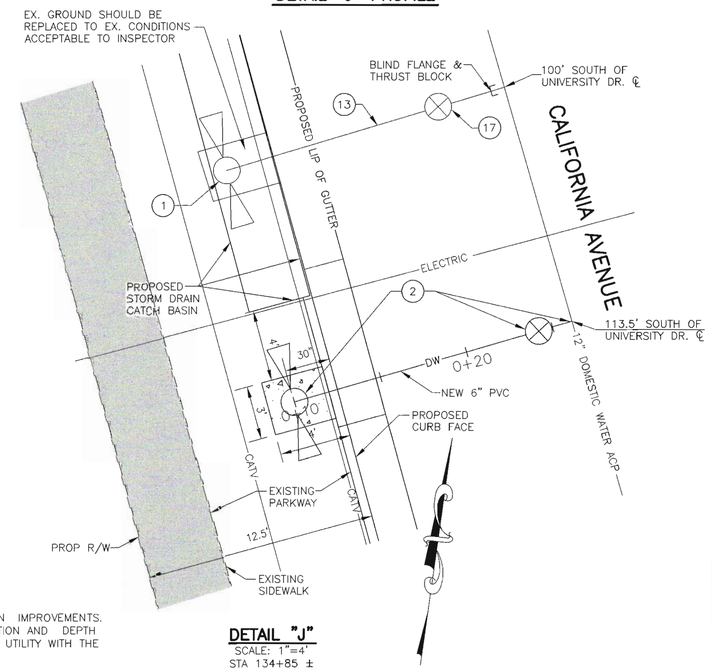
DETAIL "H"
SCALE: 1"=4'
STA 132+75 ±



DETAIL "I"
SCALE: 1"=4'
STA 134+65 ±



DETAIL "J" PROFILE



DETAIL "J"
SCALE: 1"=4'
STA 134+85 ±

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE
- (RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT
- (RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR
- (1) REMOVE EXISTING FIRE HYDRANT ASSEMBLY (RETURN TO IRWD), CONCRETE PAD, AND HYDRANT BURY
- (2) INSTALL NEW FIRE HYDRANT ASSEMBLY PER IRWD STD DWG W-8, CONDITION 3 AND CUT IN TEE FOR ACP PER IRWD STD DWG W-19
- (4A) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 1
- (4C) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3
- (4D) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 1 (MODIFIED: AIR RELEASE AND VACUUM VALUE LOCATION IS 26" BEHIND CURB FACE)
- (5) INSTALL NEW 4" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3. ONLY ONE ISOLATION VALVE IS TO BE REMOVED AND REPLACED.
- (6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES
- (9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22
- (10) INSTALL NEW BRASS INSULATING BALL CORP STOP ON EXISTING SADDLE PER IRWD STD DWG W-3
- (13) ABANDON EXISTING 6" WATER LATERAL IN PLACE, FILL WITH CEMENT SLURRY, BLIND FLANGE OPEN ENDS
- (14) REMOVE EXISTING VALVE (RETURN TO IRWD INSPECTOR) AND INSTALL NEW BFV VALVE IN KIND PER IRWD STD DWG W-22
- (16) INSTALL NEW VALVE (SIZE AND TYPE CALLED OUT ON PLANS) PER IRWD STD DWG W-22 AND ADJUST TO GRADE
- (17) REMOVE EXISTING VALVE AND INSTALL NEW 6" BLIND FLANGE AND THRUST BLOCK ON EXISTING TEE
- (18) REMOVE EXISTING CORP STOP, INSTALL BRASS PLUG ON EXISTING CONNECTION, AND CONNECT NEW AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11

NOTES

1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995
RANDALL G. BERRY RCE #44642 7/7/17 DATE

REGISTERED PROFESSIONAL ENGINEER — RANDALL G. BERRY — NO. C44642 — RENEW. 3/31/18 — CIVIL — STATE OF CALIFORNIA

CRAIG E. SIEFERT	HARRIS PROJECT ENGINEER R.C.E. 70041	7/7/17 DATE
RANDALL G. BERRY	HARRIS PROJECT MANAGER R.C.E. 44642	7/7/17 DATE
MALCOM CORTEZ	IRWD PRINCIPAL ENGINEER R.C.E. 52968	7/13/17 DATE

IRVINE RANCH WATER DISTRICT

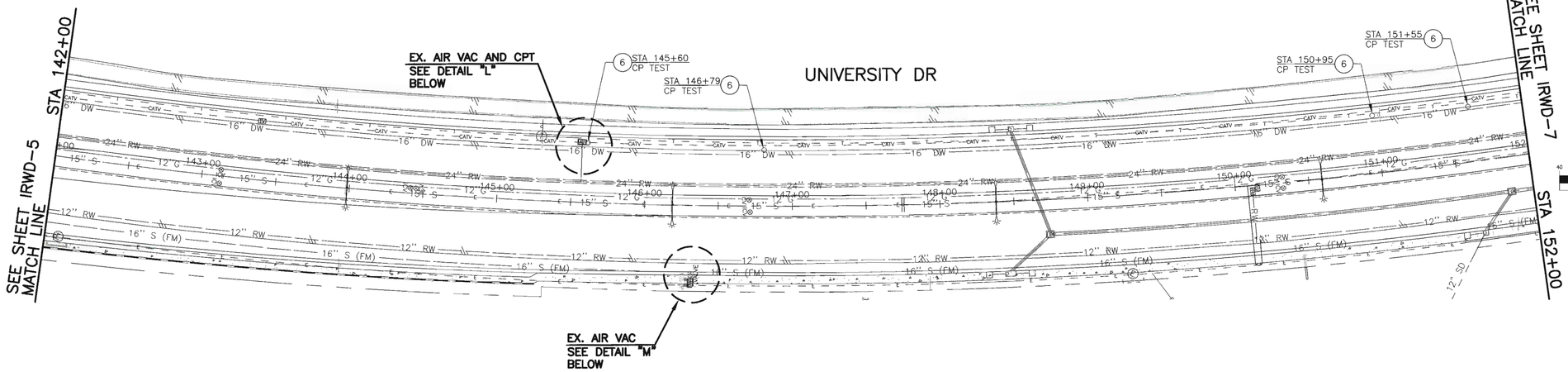
IRVINE RANCH WATER DISTRICT
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION
PROJECT NO. 7170

RELOCATION DETAILS
STA 132+00 TO STA 142+00

SHEET IRWD-5
84 OF 87 SHEETS

CODE 6788

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170
NOVEMBER 2016

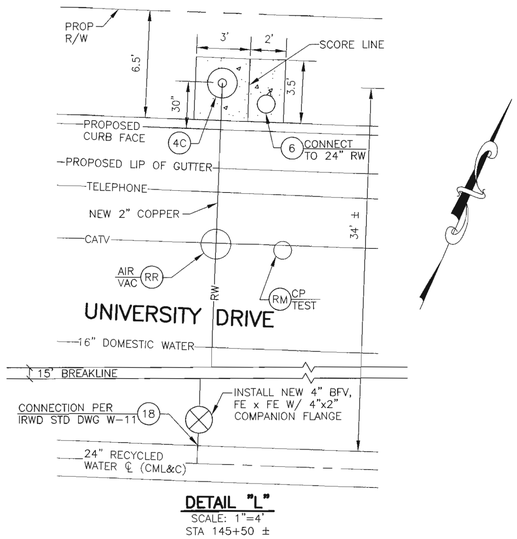


GRAPHIC SCALE

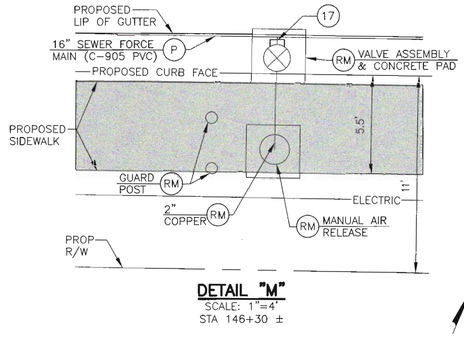
40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

UNIVERSITY DRIVE



DETAIL "L"
SCALE: 1"=4'
STA 145+50 ±



DETAIL "M"
SCALE: 1"=4'
STA 146+30 ±

NOTES

1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

CONSTRUCTION NOTES

(RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT

(RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR

(4C) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3

(6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES

(10) INSTALL NEW BRASS INSULATING BALL CORP STOP ON EXISTING SADDLE PER IRWD STD DWG W-3

(17) REMOVE EXISTING VALVE AND INSTALL NEW BLIND FLANGE

(18) REMOVE EXISTING CORP STOP, INSTALL BRASS PLUG ON EXISTING CONNECTION, AND CONNECT NEW AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates℠
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995
RANDALL G. BERRY RCE #44642 DATE 7/7/17

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

CRAIG E. SIEFERT HARRIS PROJECT ENGINEER R.C.E. 70041 DATE 7/7/17
RANDALL G. BERRY HARRIS PROJECT MANAGER R.C.E. 44642 DATE 7/7/17
MALCOM CORTEZ IRWD PRINCIPAL ENGINEER R.C.E. 52968 DATE 7/13/17

IRVINE RANCH WATER DISTRICT

IRVINE RANCH WATER DISTRICT

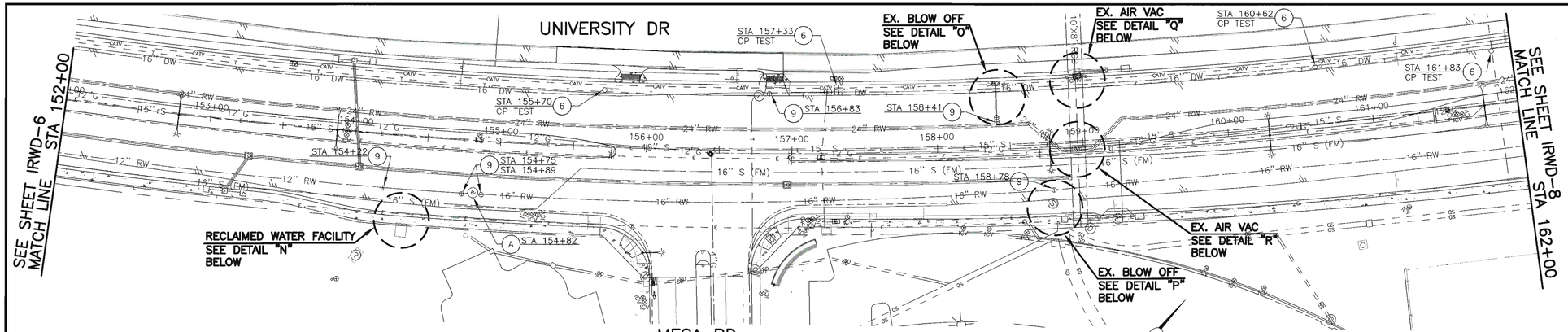
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION

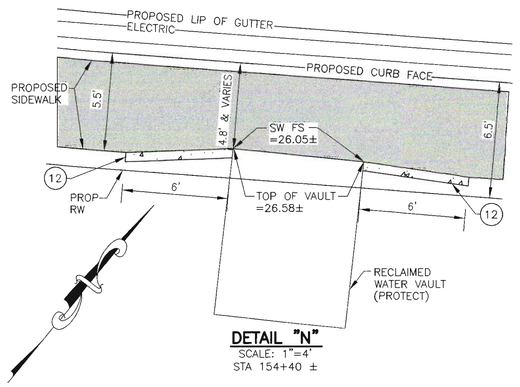
PROJECT NO. 7170

RELOCATION DETAILS
STA 142+00 TO STA 152+00

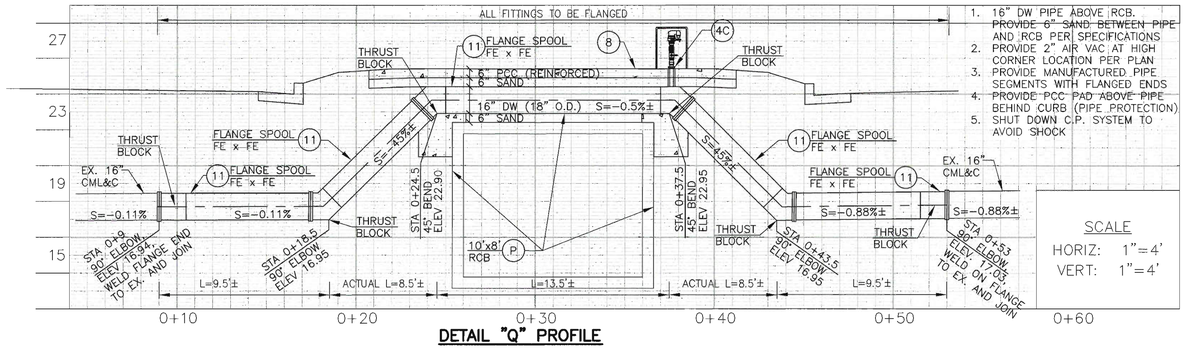
SHEET IRWD-6
85 OF 87 SHEETS

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170
NOVEMBER 2016
CODE 6788





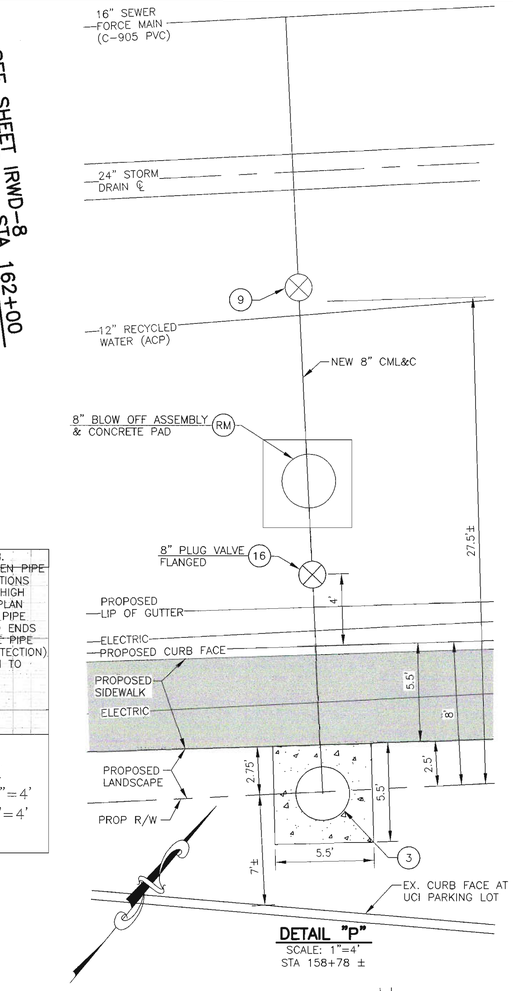
DETAIL "N"
SCALE: 1"=4'
STA 154+40 ±



1. 16" DW PIPE ABOVE RCB. PROVIDE 6" SAND BETWEEN PIPE AND RCB PER SPECIFICATIONS
2. PROVIDE 2" AIR VAC AT HIGH CORNER LOCATION PER PLAN
3. PROVIDE MANUFACTURED PIPE SEGMENTS WITH FLANGED ENDS
4. PROVIDE PCC PAD ABOVE PIPE BEHIND CURB (PIPE PROTECTION)
5. SHUT DOWN C.P. SYSTEM TO AVOID SHOCK

SCALE
HORIZ: 1"=4'
VERT: 1"=4'

DETAIL "Q" PROFILE



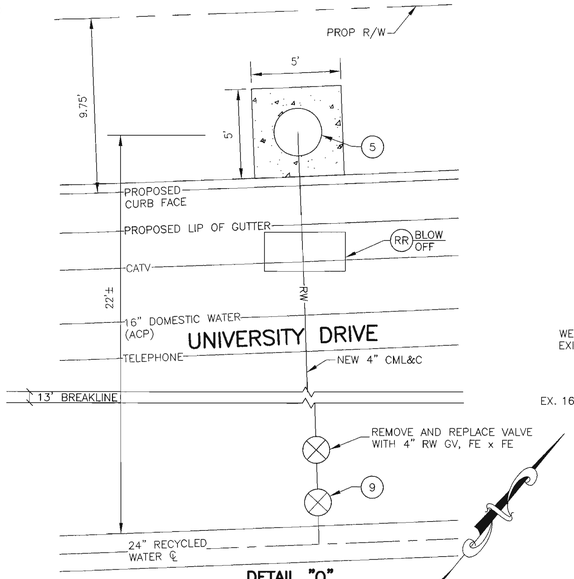
DETAIL "P"
SCALE: 1"=4'
STA 158+78 ±

NOTES

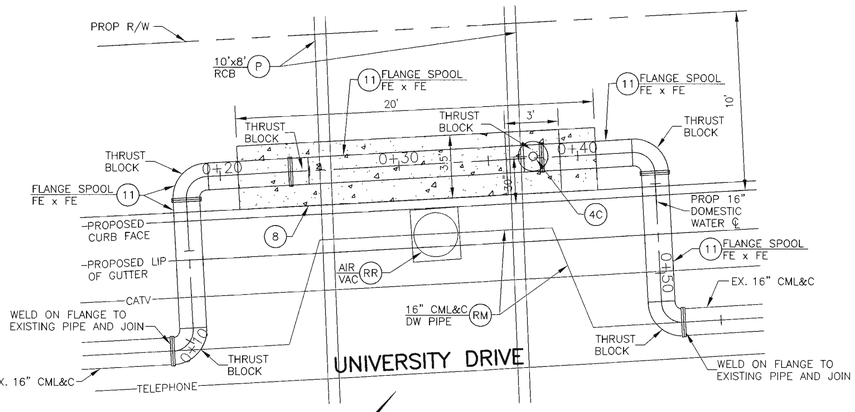
1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

CONSTRUCTION NOTES

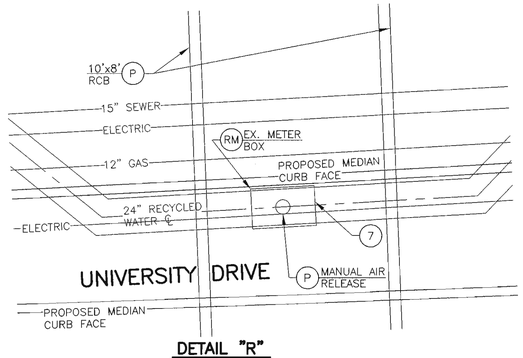
- (P) PROTECT EXISTING IMPROVEMENT IN PLACE
- (RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT
- (RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR
- (A) ADJUST EXISTING MANHOLE TO GRADE, PER IRWD STD DWG S-1
- (3) INSTALL NEW 8" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD. DWG. W-14, CASE 3
- (4C) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3
- (5) INSTALL NEW 4" BLOW OFF/BOTTOM DRAIN ASSEMBLY PER IRWD STD DWG W-14, CASE 3. ONLY ONE ISOLATION VALVE IS TO BE REMOVED AND REPLACED.
- (6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES
- (7) REMOVE EXISTING BOX AND INSTALL NEW TRAFFIC RATED METER BOX SIZED FOR 2" METER WITH METAL LID
- (8) CONSTRUCT 6" REINFORCED PCC PAD (#4 BARS @ 12" O.C., GRID PATTERN) OVER 6" SAND (PIPE PROTECTION)
- (9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22
- (11) CONSTRUCT NEW 16" (¼" THICK) CML&C STEEL DOMESTIC WATER PIPELINE (FLANGED SPOOL, FE x FE)
- (12) INSTALL "B-6" CURB ONLY PER CITY OF IRVINE STD 200
- (16) INSTALL NEW VALVE (SIZE AND TYPE CALLED OUT ON PLANS) PER IRWD STD W-22 AND ADJUST TO GRADE



DETAIL "O"
SCALE: 1"=4'
STA 158+40 ±



DETAIL "Q" PLAN
SCALE: 1"=4'
STA 158+97 ±



DETAIL "R"
SCALE: 1"=4'
STA 158+96 ±

NOTE 1: PROTECT 24"/18" RW AND SEE SECTION Z-Z ON PLAN PLAN SHEET X-2 AND DETAIL TC-1 ON SHEET SC-12.

NOTE 2: IRWD REPRESENTATIVE TO BE PRESENT DURING CONSTRUCTION CONSTRUCTION AND SHUT OFF WATER WHEN NECESSARY

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

RANDALL G. BERRY RCE #44642 DATE 7/7/17

CRAIG E. SIEFERT — HARRIS PROJECT ENGINEER R.C.E. 70041 — DATE 7/7/17
RANDALL G. BERRY — HARRIS PROJECT MANAGER R.C.E. 44642 — DATE 7/7/17
MALCOM CORTEZ — IRWD PRINCIPAL ENGINEER R.C.E. 52968 — DATE 7/13/17

IRVINE RANCH WATER DISTRICT

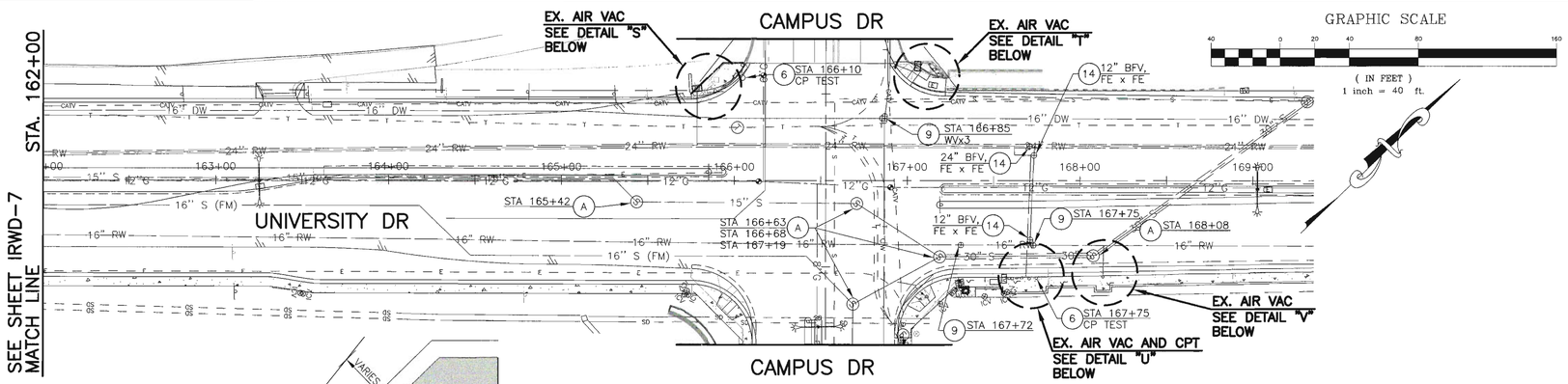
IRVINE RANCH WATER DISTRICT
UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION
PROJECT NO. 7170

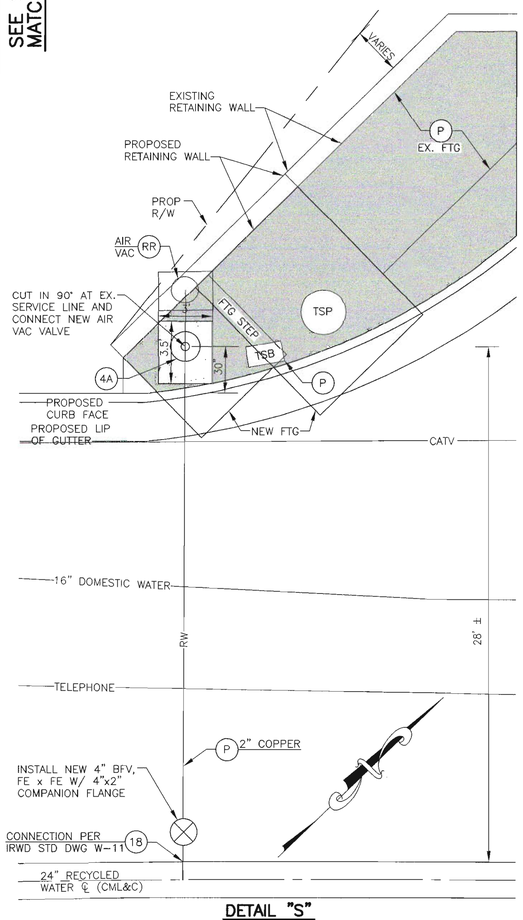
RELOCATION DETAILS
STA 152+00 TO STA 162+00

SHEET IRWD-7
86 OF 87 SHEETS

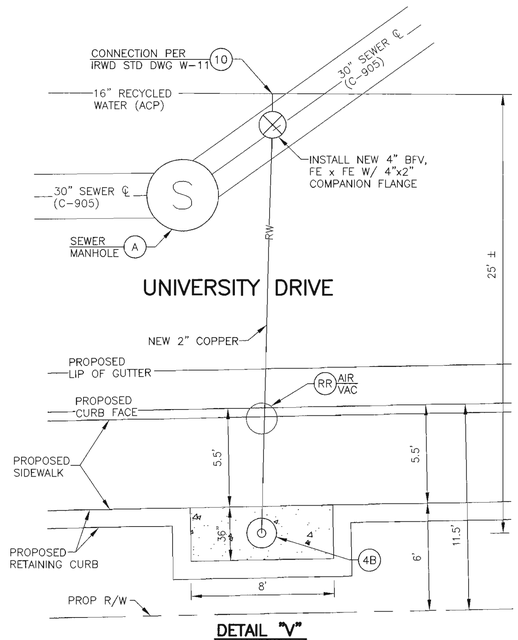
CODE 6788

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170
NOVEMBER 2016

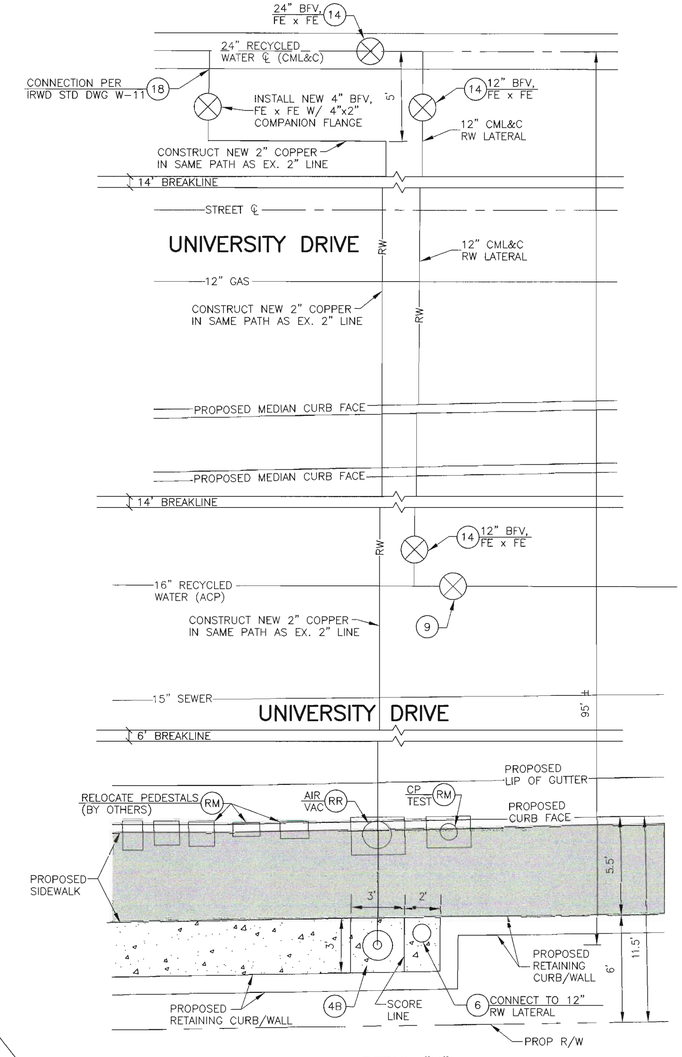




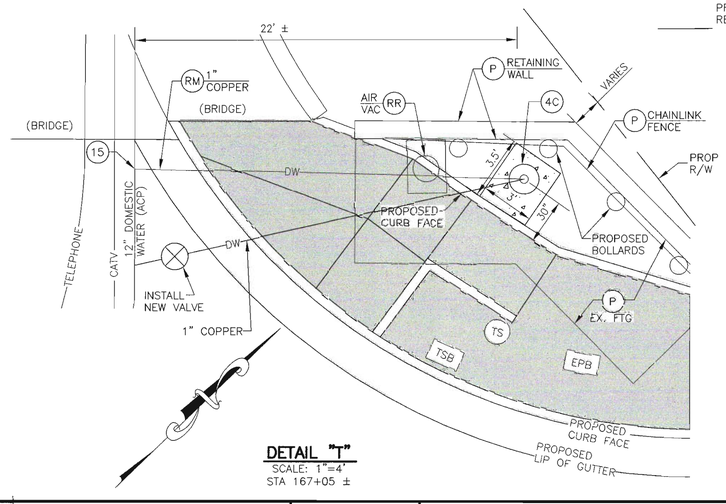
DETAIL "S"
SCALE: 1"=4'
STA 165+71 ±



DETAIL "V"
SCALE: 1"=4'
STA 168+11 ±



DETAIL "U"
SCALE: 1"=4'
STA 167+60 ±



DETAIL "T"
SCALE: 1"=4'
STA 167+05 ±

CONSTRUCTION NOTES

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE
- (RM) REMOVE AND DISPOSE OF EXISTING IMPROVEMENT
- (RR) REMOVE EXISTING IMPROVEMENT AND RETURN TO IRWD INSPECTOR
- (A) ADJUST EXISTING MANHOLE TO GRADE, PER IRWD STD DWG S-1
- (4A) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 1
- (4B) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 2
- (4C) INSTALL NEW 2" AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11, CASE 3
- (6) DISCONNECT EXISTING WIRE FROM PIPE, REMOVE EXISTING TEST STATION AND INSTALL NEW TWO WIRE TEST STATION BEHIND PROPOSED NORTHERLY CURB PER IRWD STD DWG CP-1, CP-6, CP-7 CASE 11 AND G-2, WITH NEW WIRE TO PIPELINE AND NO SPLICES
- (9) REMOVE EXISTING VALVE CAN AND INSTALL NEW VALVE CAN ADJUSTED TO GRADE PER IRWD STD DWG W-22
- (10) INSTALL NEW BRASS INSULATING BALL CORP STOP ON EXISTING SADDLE PER IRWD STD DWG W-3
- (14) REMOVE EXISTING VALVE (RETURN TO IRWD INSPECTOR) AND INSTALL NEW BFV VALVE IN KIND PER IRWD STD DWG W-22
- (15) INSTALL NEW BRASS PLUG ON EXISTING SADDLE
- (18) REMOVE EXISTING CORP STOP, INSTALL BRASS PLUG ON EXISTING CONNECTION, AND CONNECT NEW AIR RELEASE AND VACUUM VALVE PER IRWD STD DWG W-11

NOTES

1. SEE CITY OF IRVINE CIP 311306 FOR PROPOSED ROADWAY AND STORM DRAIN IMPROVEMENTS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICE CONNECTIONS IN ADVANCE OF CROSSING THE UTILITY WITH THE NEW PIPELINE.

NO.	DATE	REVISIONS	APPROVED

DESIGN: CS
DRAWN: CS
CHECK: RGB

PLAN PREPARED BY:
Harris & Associates
22 Executive Park, Suite 200 – Irvine, CA 92614
PHONE: (949) 655-3900 ● FAX: (949) 655-3995
RANDALL G. BERRY RCE #44642 7/7/17 DATE

REGISTERED PROFESSIONAL ENGINEER RANDALL G. BERRY NO. C44642 RENEW. 3/31/18 CIVIL STATE OF CALIFORNIA

CRAIG E. SIEFERT — HARRIS PROJECT ENGINEER R.C.E. 70041 — 7/7/17 DATE
RANDALL G. BERRY — HARRIS PROJECT MANAGER R.C.E. 44642 — 7/7/17 DATE
MALCOM CORTEZ — IRWD PRINCIPAL ENGINEER R.C.E. 52968 — 7/13/17 DATE

IRVINE RANCH WATER DISTRICT

IRVINE RANCH WATER DISTRICT

UNIVERSITY DRIVE WIDENING
IRWD FACILITIES RELOCATION

PROJECT NO. 7170

RELOCATION DETAILS
STA 162+00 TO STA 169+00

SHEET IRWD-8
87 OF 87 SHEETS

NOVEMBER 2016

UNIVERSITY DRIVE WIDENING IRWD FACILITIES RELOCATION PROJECT NO. 7170

CODE 6788

4.8

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR LANDSCAPE REHABILITATION

Director of Public Works

City Manager

RECOMMENDED ACTION

1. Approve the construction plans, specifications and contract documents for the Landscape Rehabilitation Capital Improvement Projects 351501 and 351601.

2. Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.

3. Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

EXECUTIVE SUMMARY

Plans, specifications and contract documents for the subject landscape rehabilitation project are complete and ready for City Council approval. These documents are available for public review in the Public Works Department. The proposed work builds upon the City's on-going water conservation efforts by increasing recycled water use and reducing landscape water consumption and run-off on public roadways. The scope of the project includes converting irrigation water meter systems from potable water to recycled water and upgrading to web-based "smart" technology controllers for public landscape areas in portions of the Rancho San Joaquin, University Park, Deerfield, El Camino Real, Ranch and Northwood communities. The project will also replace the existing turf within the medians along Barranca, Alton and Main Street in the Westpark community with low-water use plants and new drip irrigation systems. The improvements are expected to reduce the City's water rate costs for these areas by up to 15 percent. Approval of the recommended actions will allow staff to solicit competitive bids for construction and award a contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures within the approved budget.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The proposed project consists of three components that support the City's sustainable landscape practices. The first project component is the conversion from existing domestic irrigation water meter systems to new recycled water meters. This project will convert 12 domestic meters serving portions of the landscape parkway areas in various villages, as shown on the Vicinity Map (Attachment 1). By converting to recycled water, the City is expected to save between 10 to 15 percent in water rate costs for these areas.

The second component will upgrade existing irrigation controllers primarily in University Park to web-based "smart" technology controllers. The Smart Controller systems use daily weather data to set watering schedules and allow staff to remotely program the system for special events. All of the existing controllers proposed for replacement are approaching the end of the manufacturer recommended useful life. Replacement with the smart system technology will assist in reducing water costs and decrease the time needed to manually operate the systems.

The third component of the proposed project will upgrade the median landscaping on Barranca Parkway, Alton Parkway and Main Street in Westpark Village between San Diego Creek and Harvard Avenue. The existing turf will be removed and replaced with low-water use plant material and a new drip irrigation system. This new planting and low-flow irrigation system uses 50 percent less water and reduces the potential for irrigation run-off onto the adjacent roadway pavement.

The construction contract estimate, prepared by the consultant design engineer for the project, is $1,600,000. A budget allowance of $180,000 for construction engineering (material and equipment testing and inspection services) and $160,000 for construction contingency is recommended, as shown in the Project Funding Summary (Attachment 2). The City's construction contracting policies and procedures limit the award of the construction contract by staff to a maximum of 10 percent over the engineer's estimate. These policies also restrict the use of the construction contingency only for unforeseen circumstances that may arise and are necessary to complete the work within the approved project scope and budget.

Staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Notice Inviting Bids, Construction Contract, Plans, Specifications, and the proposed Schedule of Work listing the individual bid items for this project is included as Attachment 3. If approved by the City Council, construction is anticipated to begin in January 2018 with completion in August 2018. Work will take place Monday through Friday between 7 a.m. and 3:30 p.m., with temporary lane closures allowed only between 9 a.m. and 3 p.m. to facilitate the work.

ENVIRONMENTAL REVIEW

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) Procedures and Article 19 of the State of California CEQA Guidelines, the proposed project has been found to be categorically exempt from the requirements of CEQA, under State Guideline Section 15301 (h), Existing Facilities.

ALTERNATIVES CONSIDERED

The City Council could direct staff to defer the proposed landscape rehabilitation to a future date, or may direct staff to modify any of the elements of the project scope. The City Council may also approve the construction plans and related documents, authorize staff to solicit competitive bids, and direct staff to bring back the results of the competitive bid process to the City Council for its review and consideration prior to award of the construction contract.

FINANCIAL IMPACT

Project expenditures to date for preparation of the construction plans and contract documents total $217,000. The construction contract estimate prepared by the consultant design engineer is $1,600,000. The recommended budget allowance of $180,000 for construction engineering and $160,000 for construction contingency brings the total estimated project cost for the construction phase to $1,940,000. Funding for the construction phase is available in the City Council approved CIP 351501 and 351601 from the City Gas Tax Fund. A complete Project Funding summary is provided in Attachment 2.

REPORT PREPARED BY Uyenly Bui, P.E., Senior Civil Engineer

ATTACHMENTS

1. Vicinity Map
2. Project Funding Summary
3. Notice Inviting Bids, Construction Contract, Plans, Specifications and Proposed Schedule of Work

LANDSCAPE REHABILITATION
CIP 351501 AND CIP 351601



VICINITY MAP

ATTACHMENT 1

Project Funding Summary

Streetscape Rehabilitation
CIP 351501 and CIP 351601

September 12, 2017

Project Expenditures

Design Engineering	$ 217,000
Construction Contract (Engineer's Estimate)	$1,600,000
Construction Engineering	$ 180,000
Construction Contingency	$ 160,000
Total Estimated Project Cost	**$2,157,000**

Project Funding

CIP 351501 FY 14-15 Streetscape Rehabilitation	$ 1,100,000
CIP 351601 FY 15-16 Streetscape Rehabilitation	$ 1,057,000
Total Funding Available	**$ 2,157,000**

ATTACHMENT 2

CITY OF IRVINE

ORANGE COUNTY, CALIFORNIA

NOTICE INVITING BIDS, PROPOSAL, CONTRACT AND SPECIAL PROVISIONS FOR

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF STREETSCAPE REHABILITATION

CIP 351501 & CIP 351601
BID NO. 17-1244

CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CALIFORNIA 92623-9575

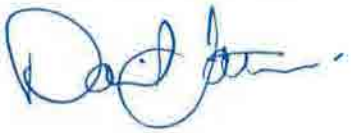
PREPARED BY:
TATSUMI AND PARTNERS, INC.,
49 DISCOVERY, SUITE 120
IRVINE, CA 92618

July 2017

ATTACHMENT 3

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601

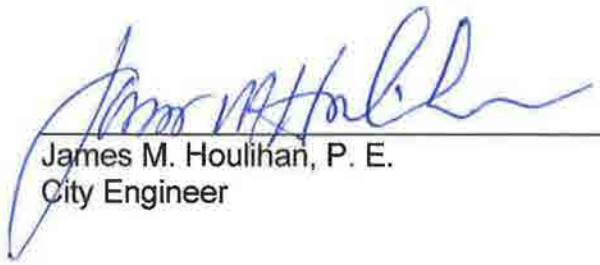
THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR UNDER THE DIRECTION OF:



David Tatsumi
Landscape Architect
Tatsumi and Partners, Inc.

2033
RLA No.

APPROVED BY:



James M. Houlihan, P. E.
City Engineer

51568
R.C.E. No.

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- A - STANDARD PLANS

CITY OF IRVINE, CALIFORNIA
NOTICE INVITING BIDS
Bid No. 17-1244

NOTICE IS HEREBY GIVEN that sealed bids with online bid price submittal will be received by the Purchasing Agent of the City of Irvine, California, for furnishing all labor services, materials, tools, equipment, supplies, transportation, utilities and all other items and facilities necessary therefore, as provided in the contract documents for **Streetscape Rehabilitation** together with appurtenances thereto, in strict accordance with the Specifications on file at the **Department of Public Works**, 6427 Oak Canyon, Bldg. 1, Irvine, California 92618-5202.

DATE OF OPENING BIDS: **Bid prices for each line item of the Schedule of work must be entered and all other required documents for the bid proposal packet (pages 12, 22-35) must be uploaded to the BidsOnline system in accordance with the instructions beginning on page 20, no later than XX:XX am on Month Date, 20XX at which time bids will be publicly read aloud at 1 Civic Center Plaza, Irvine, California 92606-5207. No late bids will be accepted. No other method of bid submittal will be accepted.**

LOCATION OF THE WORK: The work to be performed hereunder is located in the City of Irvine, County of Orange, at these locations: Yale Avenue, Heritage Park, Michelson Drive and University Drive, Rosa Drew Lane, San Joaquin, Culver Drive and University Drive, Montanas Este and University Drive, Deerfield Avenue and Yale Avenue, Culver Drive and Ferris Street, Monticello Avenue, Triomphe Avenue and Jeffrey Road, Main Street and Alton Parkway between San Diego Creek and Harvard Avenue, and Barranca Parkway between Peters Canyon Channel and Harvard Avenue, and the Village of University Park.

DESCRIPTION OF WORK: The work to be performed shall include, but not be limited to:

Conversion of existing potable irrigation systems to recycled water, removing and retrofitting irrigation components, removal and replacement of irrigation controllers and irrigation systems, clearing and grubbing, landscape planting and other items not mentioned here, but are required by the plans and the Special Provisions. The Engineer's construction cost estimate for the project is above $1,600,000 (rounded to the nearest ten thousand).

LICENSE REQUIREMENT: **Prime Contractor must possess a valid Class A or C-27 license.** At the time of submitting the bid, the Bidder shall be licensed as a contractor in accordance with the provisions of California Business and Professions Code Chapter 9, Division 3.

DEBARRED CONTRACTORS: The City of Irvine Municipal Code Section 2-12-101 *et seq.* sets forth procedures to debar Contractors from bidding or performing work on City of Irvine contracts at any tier, whether prime, subcontractor, etc. Accordingly, certain Contractors have been debarred and are listed on the City's website at www.cityofirvine.org/purchasing. Click on the link which states: "For a list of Debarred Contractors, please click here."

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All work shall be completed in a total of **One Hundred Twenty (120) Working Days** (excluding plant establishment) and **One Hundred Fifty (150) Working Days** (including plant establishment) from the date specified in the Notice to Proceed. Liquidated damages shall be Two Thousand Two Hundred Fifty Dollars **($2,250)** per Calendar Day, for each and every Calendar Days delay in finishing the work, except plant establishment work, in excess of the number of Working Days prescribed above**,** and liquidated damages shall be **Five Hundred Dollars ($500)** per Calendar Day, for each and every Calendar Days delay in completing the plant establishment work in excess of the number of Working Days prescribed above. In no case will liquidated damages be assessed at more than **Two Thousand Two Hundred Fifty Dollars ($2,250**) per Calendar Day.

AWARD OF CONTRACT: The award of the Contract, if it is awarded, will be to the lowest responsive and responsible Bidder whose bid complies with all the requirements prescribed. The City reserves the right, after opening bids, to reject any or all bids, to waive any informality in a bid, to make awards in the interest of the City, and to reject all other bids.

PROPOSAL GUARANTEE AND BONDS: Each bid shall be accompanied by a scanned copy of a certified or cashier's check or corporate surety bond issued by a surety company, admitted to do business in the State of California, on the form furnished by the City as guarantee that bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure Workers' Compensation insurance, and liability insurance, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the contract ("Performance Bond") and for the payment of claims of materialmen and laborers thereunder ("Payment Bond"). Said check or bidder's bond shall be in an amount of not less than ten percent (10%) of the amount of the bid. **Bidders with the apparent three lowest responsive bids shall deliver an original hard copy of the certified check, cashier's check or surety bond to the Receptionist for the Purchasing Agent at 1 Civic Center Plaza, Irvine, CA, 92606 within two business days of the bid opening date.** The Performance and Payment Bond shall be not less than one hundred percent (100%) of the total amount of the bid price named in the contract. Only bonds issued by companies admitted to do business in the State of California will be accepted in accordance with the Code of Civil Procedure Section 995.311. Failure to submit acceptable Payment and Performance Bonds as required shall result in a rejection of the bid and a forfeiture of the proposal guarantee.

PREVAILING RATES OF WAGES: **Prevailing wage requirements apply to public works projects with a value exceeding $1,000.00. The definition of "public works" is found at Labor Code Section 1720, *et seq.***

The City is subject to the provisions of law relating to public contracts in the State of California. It is agreed that all provisions of law applicable to public contracts are a part of this Agreement to the same extent as though set forth herein, and will be complied with by Contractor. Contractor shall abide by all applicable Sections of the California Labor Codes including Sections 1770 -1781, *et seq*. In accordance with the provisions of Section 1773 of the California Labor Code, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the Work is to be performed shall be in accordance with the rates posted on the Department of Industrial

Relations website, found at http://www.dir.ca.gov/dirdatabases.html. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Agreement.

The City of Irvine reminds all contractors and subcontractors of the adoption of **State of California Senate Bill No. 854 (SB 854),** and encourages them to understand and comply with the requirements as set forth on the Department of Industrial Relations (DIR) website at http://www.dir.ca.gov/Public-Works/PublicWorks.html. All contractors and subcontractors who plan to bid on a public works project (including maintenance work) with a value exceeding $1,000.00 must first be registered and pay an annual fee with the DIR. The City requires all contractors and subcontractors to be registered with the DIR prior to submitting a bid on any public works project. Subject to the exceptions set forth in Labor Code Section 1725.5, bids from contractors that are not currently registered will be deemed nonresponsive. Further, the City will not award a contract to and no contractor or subcontractor will be allowed to work on a City public works project unless they are registered with the DIR pursuant to Labor Code Section 1725.5. Please visit the DIR website for further information.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

LABOR REGULATIONS: The Contractor shall comply with all applicable requirements of the California Labor Code and the City of Irvine Municipal Code.

PLANS AND SPECIFICATIONS: A full set of bid documents consisting of Notice Inviting Bids, Proposal, Contract, Special Provisions and Contract Plans are available for inspection without charge at the Department of Public Works, Project Management Division, City of Irvine Operations Support Facility, 6427 Oak Canyon, Building 1, Irvine, California 92618-5202.

To obtain a copy of the bid documents, please visit the City of Irvine's website at www.cityofirvine.org/purchasing. Click on the "Supplier Registration and Bid Opportunities" link, and review the information about our online system. Next, click on the "BidsOnline" link. If you are not currently registered with the City of Irvine, please click on the "New Vendor Registration" button and then complete the electronic supplier registration process, including selecting Category Code(s) describing the goods and/or services you provide, as well as entering your Contractors State License information. After registering your firm, click on the "Bid Opportunities" button to view and download the Bid Documents. Interested firms must be registered on the City's website and download the Bid Documents in order to submit a bid. Firms must also check the website periodically for addenda information as failure to download any and all addenda will result in bid disqualification.

SECURITY FOR COMPLETION OF WORK: The Contract Documents establish a provision for monthly progress payments based upon the percentage of work completed as determined by the Engineer. The City will retain a portion of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amount so retained upon compliance with the requirements of California Public Contract Code § 22300 and the provisions of the Contract Documents, Special Provisions Subsection 9-3.2.2 pertaining to "Substitution of Securities."

PROJECT ADMINISTRATION: All questions relative to this project prior to opening bids shall be prepared in writing and transmitted to the attention of Ms. Uyenly Bui, Senior Civil Engineer, by email to uyenlybui@cityofirvine.org, with a copy to Mr. Brian D. Brown, Senior Buyer, bbrown@cityofirvine.org. Inquiries will not be accepted later than five (5) business days prior to the bid opening date as this would not allow time to respond to all plan holders. No phone inquiries will be accepted.

CITY OF IRVINE

Published by:
Publication Date:

INSTRUCTION TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS

1. CONTRACT DOCUMENTS: The Contract Documents shall consist of:

    a) Permits and Agreements

    b) Contract

    c) Addenda

    d) Instructions to Bidders, Proposal Requirements and Conditions

    e) Special Provisions

    f) Contract Plans

    g) Standard Plans

    h) Standard Specifications

    i) Reference Specifications,

    all of which are on file at the City of Irvine in the Public Works Department, Project Management Division, Operations Support Facility, 6427 Oak Canyon, Bldg. 1, Irvine, California, and are hereby referred to and made a part hereof.

2. PROPOSALS: To be considered, bids shall be made according to the following instructions:

    a) For the convenience of bidders, the “SCHEDULE OF WORK” has been posted on the City’s BidsOnline system. Bidders must enter their unit price information online in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS included herein. Unit prices must be entered online and then the extended prices and total bid price will be automatically calculated.

    b) Bids shall be submitted only on bid items stated in the Bid Documents; bids on other bases will not be considered. Bids that are not submitted on the prescribed forms, and in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS may be rejected.

    c) Unless called for, additive bids will not be considered.

    d) Pursuant to the provisions of Public Contract Code § 4101 to 4108, inclusive, every Bidder shall set forth in its bid:

        1) The Bidder shall list the name, license number and location of the place of business of each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater.

        2) The bid item numbers and the percentage of the bid item subcontracted.

    e) In the event additive bids are called for and the Bidder intends to use different or additional subcontractors on the additive(s), the Bidder shall fill

out additional forms of the list of subcontractors and shall identify such forms with relation to whether they apply to the base or additive bids.

f) If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2%) of the Bidder's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the Bidder's total bid or ten thousand dollars ($10,000), whichever is greater, the Bidder agrees to perform that portion of work himself. The successful Bidder shall not, without the consent of the City, either:

   1) Substitute any person, firm or corporation as subcontractor in place of the subcontractor designated in the original bid, or

   2) Permit any subcontract to be assigned or transferred or allow the work to be performed by anyone other than the original subcontractor listed in the bid.

g) If required in the Notice Inviting Bids, bids shall be accompanied by a certified or cashier's check or an acceptable corporate bid bond on the form furnished by the City for an amount not less than ten percent (10%) of the bid, made payable to the order of the City of Irvine. The check or bid bond shall be a guarantee that the Bidder will enter into a contract and provide all required insurance and bonds if awarded the work; and in case of refusal or failure to enter into the contract, the check or bid bond shall be forfeited. The City will return Bidder's check if the project is not awarded to Bidder.

   Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090.

h) Before submitting a bid, bidders shall carefully examine the work site, the Contract Documents and the form of Contract and shall fully inform themselves about all existing conditions and limitations. Bidders shall include in their bids a sum to cover the cost of all work included in the Contract.

i) Bid prices must be entered and the bid proposal packet must be uploaded to the Bids Online System on or before the day and hour set for the bid opening in the Notice Inviting Bids. No other method of bid submittal will be accepted. Bidders with the three apparent lowest responsive bids shall deliver an original hard copy of the certified check, cashier's check or surety bond to the Receptionist for the Purchasing Agent at 1 Civic Center Plaza, Irvine, CA, 92606 within two business days of the bid opening date.

j) A bid may be considered non-responsive if it does not comply with the requirements set forth in these bid documents. A responsive bid is one that complies with the solicitation in all acceptability and material respects and contains no material defects. A material defect is one that affects price, quality, quantity or delivery terms.

3. WITHDRAWAL OF BIDS: Bids may be withdrawn at any time before the bid deadline, by going back into the BidsOnline system and selecting "withdraw."

4. INTERPRETATION OF DRAWINGS AND DOCUMENTS; REQUESTS FOR CLARIFICATION: If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the plans and specifications, or other proposed Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he shall submit to the Purchasing Agent a written request for all interpretations or corrections thereof via email to the project manager and purchasing staff prior to the deadline for submitting questions, as set forth in the Notice Inviting Bids section herein. Any clarification or correction of the proposed documents will be made only by Addendum duly issued, with notice provided to all firms who downloaded the bid documents from the City's website. The City is not responsible for any other explanations or interpretations of the proposed documents.

5. ADDENDA TO THE CONTRACT DOCUMENTS: Any addenda issued during the time of bidding, or forming a part of the Contract Documents after the Bidder has downloaded the bid documents from the City's website, shall be taken into account in the bid and shall be made a part of the Contract.

   Addenda may be issued by the City of Irvine for any reason, including but not limited to, clarifying or correcting the Notice Inviting Bids, Special Provisions, Plans, or Bid.

   Bidders will be notified of such Addenda during the period of advertising either by email or posting on the City's website, provided however, each Bidder shall be solely responsible for obtaining any such Addenda.

   The Bidder shall acknowledge the receipt of Addenda on the City's BidsOnline system.

6. BIDDER RESPONSIVENESS: Failure of the Bidder to provide requested information in a complete and accurate manner may be considered non-responsive resulting in rejection of the bid. The use of "N/A" or "n/a" in response to any request for information without an explanation as to why that abbreviation is being used may render the bid non-responsive.

7. BIDDER RESPONSIBILITY: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Contractor is non-responsible if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any other entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; or (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider Bidder's past conduct on City projects or on any other public or private projects upon which Bidder performed work.

8. BIDDER DEBARMENT: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Bidder shall be debarred if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider past conduct of the Contractor on City projects or on any other public or private projects which Contractor performed work.

9. OPENING BIDS: Bids will be publicly opened and read at the time and place set in the Notice Inviting Bids.

10. BID PROTEST PROCEDURES:

    a) BASIS FOR PROTEST: It is the policy of the City to ensure that free and open competition takes place in all procurement activities. If, in the course of a procurement action, an interested party has reason to believe that these conditions do not exist, the interested party may file a protest in accordance with the provisions of these procedures with the City of Irvine Purchasing Agent requesting a review of the claim and a timely resolution of the issue. Any bidder on a project for which it submitted a timely bid may protest the contract award for that project; however, subcontractors, suppliers or other third parties may not protest contract awards. Moreover, complaints about alleged ambiguity of the bid documents and/or estimates are not appropriate subject matters for bid protests.

    b) BID PROTEST CONTENTS: The bid protest shall be submitted in writing via email to the attention of the Purchasing Agent. The written protest shall include:

        1) The solicitation number and project description.

        2) The name, address, phone number, and email address of the protesting party.

        3) A detailed statement of all the legal and factual grounds for the protest and all relevant, supporting documentation (including all written documentation). The grounds for protest must be fully supported.

        4) Statement of the form of relief requested from the City.

        5) Signature of an authorized representative of the protesting party.

    c) DEADLINE TO SUBMIT BID PROTESTS: Bid protests must be filed within five (5) business days after the deadline for receiving bids.

d) WHERE TO FILE: All protests are to be directed to the City of Irvine Purchasing Agent. Protests must be submitted in writing via email to: purchasing@cityofirvine.org. A copy of the email must also be sent to the project manager whose email address is set forth in the bid documents. (A document is considered filed on a particular calendar day when it is received via email by the City of Irvine Purchasing Agent by 5:00 p.m., Pacific Standard Time, on that calendar day.) Although not required, in addition to submitting a protest via email, an original protest letter may be sent via United States Postal Service to: Attn: Purchasing Agent, City of Irvine, P.O. Box 19575, Irvine, CA 92623-9575.

e) BID PROTEST REVIEW: Upon receipt, the Purchasing Agent shall consider the protest and may give notice of the protest and its basis to other persons including bidders involved in or affected by the protest. A protest shall be dismissed for failure to comply with any of the requirements set forth in the "Bid Protest Contents" section above. The Purchasing Agent shall review all material submitted with the protest. No additional material will be accepted for consideration from the protesting party unless specifically requested by the Purchasing Agent. If additional material is requested, it must be submitted by the requested date. The Purchasing Agent shall respond to the protesting party via email within ten (10) business days after receipt of the protest. Final determinations shall be binding, except as otherwise provided below.

f) RECONSIDERATION OF PROTEST DECISION: A protesting party may request the Purchasing Agent's reconsideration of a decision prior to contract award only if one or both of the following conditions are met:

   1) New information becomes available that was not previously known, or could not have been reasonably known, at the time of the original protest; and/or

   2) The Purchasing Agent's decision contains an error of law.

   Any request for reconsideration of a protest decision must be submitted in writing via email to the Purchasing Agent within three (3) business days from the date of issuance of the initial decision. The request must include a detailed explanation of the basis for reconsideration as set forth above. The Purchasing Agent shall respond to the request for reconsideration within seven (7) business days from receipt of the request.

g) CONTRACT AWARD: At its discretion, the City may delay the execution of any proposed agreement pending the resolution of a protest unless one or both of the following conditions are present:

   1) The project or service being procured is urgently required; and/or

   2) Failure to make prompt award will otherwise cause undue harm to the City.

h) REMEDIES: There shall be no limitation on remedies selected by the City. Nothing contained herein shall be considered to either act as a limitation on the City's choice of remedies or confer any right upon any interested party to a remedy. In determining the appropriate remedy, the City shall consider all the circumstances surrounding the solicitation, the contract

selection, and/or the contract award, including, but not limited to: the seriousness of any deficiency found to exist in the contracting process; the effect of the action of the competitive process; any urgency surrounding the contract requirement; and the effect that implementing the remedy will have on the City's overall ability to accomplish its mission. If the City determines that the award or proposed award was not made in accordance with the applicable City statutes, regulations, policies, and procedures, the City may, in its sole discretion, grant any of the following or any other remedy it deems appropriate: If pre-award, reject all bids and issue a new solicitation, make a new contractor selection or award a contract consistent with applicable statutes, regulations, policies, and procedures; or if post-award, refrain from extending the term of the contract or awarding task orders under an existing task order agreement; or at its sole discretion, take no further action.

11. AWARD OR REJECTION OF BIDS AND EXECUTION OF CONTRACT: The award of the Contract will be as of the date specified in the Notice of Award issued by the City. The award of the Contract shall not constitute a binding obligation on City until the Contract has been lawfully executed by all parties and the Contractor has submitted all required insurance certificates and bonds to the City.

    The Contractor shall not commence work in advance of the execution of the Contract and the delivery of the bonds and insurance certificates, as specified above.

    The award of the Contract, if it is awarded, will be to the responsive and responsible Bidder who submitted the lowest Bid complying with these Proposal Requirements and Conditions and with the Notice Inviting Bids. Such award, if made, will be made within ninety (90) Calendar Days after the opening of the proposals. The ninety (90) Calendar Days period shall be subject to extension for such further period as may be agreed upon in writing between the City and the Bidder(s) concerned. All bids will be compiled on the basis of the estimated quantities of work to be done as shown in the Proposal. However until an award is made, the City of Irvine reserves the right to reject any and all bids or to waive any informality in bids received, if doing so is deemed to best serve the interest of the City.

12. CONTRACT AND BONDS: The Contract, which the successful Bidder, as Contractor, will be required to execute, is included in the Contract Documents and should be carefully examined by the Bidder.

    The successful Bidder, simultaneously with his execution of the Contract will be required to furnish a Payment Bond and a Performance Bond. Said bonds shall be in the form of the two (2) sample bonds included in these Contract Documents and based upon conditions specified in the Standard Specifications Section 2-4, "Contract Bonds," and as specified in the Special Provisions and shall be secured from a surety company satisfactory to the City.

    Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and

Insurance Code § 12090. Failure to submit acceptable Payment and Performance Bonds as required shall result in rejection of bid and forfeiture of the proposal guarantee.

All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents will be made without securing the consent of the surety or sureties on the Contract bonds.

The Contract shall be signed by the successful Bidder, and delivered to the City together with the Contract bonds within ten (10) days of the date specified in the Notice of Award issued by the City, not including Saturdays, Sundays and legal holidays. The Contractor shall submit insurance certificates electronically in accordance with 7-3 of the Standard Specifications and the Special Provisions. The executed Contract, together with the required bonds, will be filed with the Clerk of the City of Irvine.

Failure of the lowest responsive and responsible Bidder to execute the Contract and file acceptable insurance certificates and bonds as provided herein within ten (10) days of award of the Contract, not including Saturdays, Sundays and legal holidays, shall be just cause for the forfeiture of the bid bond. The successful Bidder may file with the City a written notice, signed by the Bidder or his authorized representative, specifying that the Bidder will refuse to execute the Contract if presented to him. The filing of such notice shall have the same force and effect as the failure of the Bidder to execute the Contract and furnish acceptable certificates of insurance and bonds within the time herein before prescribed.

13. SPECIAL NOTICE: Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the Work will be performed, and the Contractor must employ, so far as possible, such methods and means in the carrying out of this work as will not cause any interruption or interference with any other contractor.

14. BIDDERS INTERESTED IN MORE THAN ONE BID: No person, firm or corporation shall be allowed to make or file or be interested in more than one bid as prime contractor for the same work.

15. BIDS TO BE LEFT ON DEPOSIT: No Bidder may withdraw its bid for a period of ninety (90) Calendar Days after the time set for opening thereof. However, the City will return all certified checks within fifteen (15) days, not including Saturdays, Sundays and legal holidays, after the award of the Contract or rejection of the bids, as the case may be, to respective Bidders whose bids are not accepted.

16. NON-COLLUSION DECLARATION: All Bidders shall submit with their bids an executed non-collusion declaration on the form provided in the bidding documents. Failure to provide completed form shall result in the bid being deemed non-responsive.

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is 800-424-9071. The service is

available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

17. SUBSTITUTIONS: Where the Specifications or drawings specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and a Bidder wishes to propose the use of another item as being equal, he shall request approval therefor as set forth in 4-1.6 of the Standard Specifications and Special Provisions.

18. REPORTING SUSPECTED IMPROPRIETY, GROSS WASTE, FRAUD AND OTHER ACTS: Any City and/or Great Park official, employee, and/or contractor who suspects any type of impropriety relating to purchasing or contracting activities, or gross waste, fraud, or abuse of City and/or Great Park funds or resources, a gross abuse of authority, a specified and substantial danger to public health or safety due to any act or omission of any City and/or Great Park official, employee, or contractor, or the use of a City and/or Great Park office or position or of City and/or Great Park resources for personal gain, should report the act by calling the City's Integrity Line at 866-428-1509. All such reports shall remain anonymous if desired by the reporting party. Suspected fraudulent activities include bid rigging, product substitution, theft, overcharging, false certifications and representations, and the like. Any allegations of bribery, kickbacks, gratuities, and conflicts of interest involving City employees should also be reported.

19. ASSIGNMENT OF CONTRACT: No assignment by the Contractor of any Contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the City unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment in writing.

20. OTHER REQUIREMENTS: Before entering into a Contract, the Bidder to whom the Contract has been awarded shall satisfy all insurance requirements per Section 7-3 of the Standard Specifications and Special Provisions and such insurance shall be maintained in full force and effect at its own expense during the life of this Contract.

    Upon request, the successful Bidder shall furnish to the City a statement of its financial condition and previous construction experience or such other evidence of his qualifications.

21. LABOR CODE:

    PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM

    In accordance with State of California Senate Bill No. 854 (SB 854), contractors bidding on and/or engaging in the performance of public works projects (the definition of "public works" is found at Labor Code Section 1720, *et seq.*) shall be registered with the Department of Industrial Relations. By submitting a bid for City of Irvine Public Works project, the contractor acknowledges the above

requirements and agrees to maintain a valid Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
b) Pursuant to Labor Code Section 1771.4, all bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

In addition to the requirement for submittal of certified payroll records to the City, contractors and subcontractors shall furnish electronic certified payroll records to the Labor Commissioner **(State of California, Division of Labor Standards Enforcement).**

Contractors and subcontractors shall be responsible for complying and staying current with all DIR requirements and regulations. More information on SB 854 can be found at http://www.dir.ca.gov/Public-Works/SB854.html

Attention is directed to Labor Code § 1735 of which reads as follows:

> No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in the Government Code §12940, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter.

The Contractor shall abide by the provisions of the California Labor Code § 1770-1781, *et seq*. In accordance with the provisions of the California Labor Code § 1773, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the work is to be performed has been obtained from the Director of the Department of Industrial Relations, a copy of which is on file in the office of the City Clerk of the City of Irvine and will be made available to any interested party upon request. The Contractor shall post a copy of the prevailing rate of per diem wages at the job site. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of the contract.

Failure to comply with the subject sections will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1775.

In accordance with of the Labor Code § 1773.1, the Contractor must make travel and subsistence payments to each worker employed in the execution of the Contract.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract.

The Contractor shall familiarize itself with the provisions of the Labor Code § 1777.5 regarding employment of apprentices, and shall be responsible for compliance therewith, including compliance by his subcontractors.

The Contractor and subcontractors shall comply with Labor Code § 1777.6 which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age except as provided in Labor Code § 3077, of such employee.

The Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

22. RESERVATION OF RIGHTS:

The City reserves the right to:

a) Disqualify any Bidder in accordance with the instructions herein.

b) Reject any bids, at its discretion, including bids found to be conditional or incomplete, contain irregularities or found to be not responsive to this Instruction to Bidders (ITB.)

c) Investigate the qualifications of any Bidder under consideration.

d) Require confirmation of information furnished by the Bidder.

e) Require additional evidence of Bidder’s ability to perform the Work described in this ITB.

f) Contact the submitted references to confirm information provided in the bid.

g) Postpone or cancel the entire ITB or a portion thereof.

h) Postpone the bid opening or award for its own convenience.

i) Award a Contract in part or in combination of items.

j) Issue subsequent ITB.

k) Seek the assistance of outside technical experts to review the bids.

l) Disqualify a bid upon evidence of collusion, with intent to defraud, or other illegal practices on the part of the Bidder.

m) Waive any errors or informalities in any bid to the extent permitted by law.

n) Require bidder to provide proof as to the equality, substitutability, and compatibility of any items proposed as alternates or equals.

o) Determine, at the City's sole discretion, the equality, substitutability, and compatibility of any items proposed as alternates or equals.

p) Exercise any other rights under the City's charter or municipal code.

The City has no obligation to consider any bid unless it is responsive to this ITB and conforming in all respects to the Form of Contract. This ITB does not commit the City to enter into a Contract.

BIDDER'S PROPOSAL
CONSTRUCTION
OF
STREETSCAPE REHABILITATION

CIP 351501 & CIP 351601
BID NO. 17-1244

HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL
CITY HALL
IRVINE, CALIFORNIA

THE UNDERSIGNED, HAVING CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS; PERMITS ISSUED BY JURISDICTIONAL REGULATORY AGENCIES; CONTRACT; CONTRACT ADDENDA; INSTRUCTIONS TO BIDDERS; PROPOSAL REQUIREMENTS AND CONDITIONS; SPECIAL PROVISIONS; THE PLANS (SHEETS 1 THROUGH 27); STANDARD PLANS; STANDARD SPECIFICATIONS; REFERENCE SPECIFICATIONS; AND ALL OTHER INFORMATION PROVIDED BY THE AGENCY FOR THE CONSTRUCTION LISTED ABOVE IN AND FOR THE CITY OF IRVINE, IS FAMILIAR WITH THE CONDITIONS, HAVING PERSONALLY VISITED THE SITE OF THE WORK, AND HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND ALL INCIDENTAL WORK NECESSARY TO DELIVER ALL THE IMPROVEMENTS COMPLETE, IN PLACE AND IN STRICT CONFORMITY WITH THE CONTRACT DOCUMENTS, FOR THE UNIT PRICES NAMED IN THE FOLLOWING SCHEDULE OF WORK AND BID PRICES.

_____
Bidder's Company Name (please print or type)

_____
Signature of Bidder

_____
Print Name

CITY OF IRVINE

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID No. 17-1244

SCHEDULE OF WORK

All applicable sales taxes, State and/or Federal taxes, and any other special taxes, patent rights or royalties are included in the prices quoted in this Proposal.

ITEM NO.	ITEM DESCRIPTION	UNIT	EST. QTY
1	Mobilization	LS	1
2	Traffic Control	LS	1
3	Prepare & Implement Water Pollution Control Plan (WPCP)		
3	Clear and Grubbing	SF	40,000
4	Soil Preparation and Fine Grading	SF	40,000
5	Organic Soil Amendment	CF	1,455
6	Wood Mulch – 2” Depth	CY	249
7	24” Box Tree	EA	8
8	1-Gallon Plant	EA	2,143
9	5-Gallon Plant	EA	359
10	Irrigation System	LS	1
11	Gate Valve – 2”	EA	20
12	Gate Valve – 2-1/2”	EA	1
13	Remove Existing Backflow Preventer	EA	3
14	Install 2” Reduced Pressure Zone Assembly (Backflow)	EA	2
15	Remote Control Valves – 1”	EA	22
16	Quick Coupler, 1-inch size	EA	32
17	Master Valve/Pressure Regulator - 2”	EA	6
18	Basket (or Wye) Strainer	EA	7
19	Pressure Reducing Valve – 2”	EA	1
20	Flow Sensor – 2”	EA	6
21	Fertilizer Injection System	EA	3
22	Control Wires and Conductors	LF	13,500
23	Controller Unit – 12 station	EA	20
24	Controller Unit – 18 station	EA	5
25	Controller Unit – 24 station	EA	15
26	Controller Unit – 36 station	EA	2
27	Controller Unit – 42 station	EA	4
28	Controller Unit – 48 station	EA	2
29	Irrigation Sleeve – 2”	LF	70
30	Irrigation Sleeve – 3”	LF	100

ITEM NO.	ITEM DESCRIPTION	UNIT	EST. QTY
31	Irrigation Sleeve – 4”	LF	35
32	Irrigation Sleeve – 6”	LF	255
33	Directional Boring	LF	175
34	Trench Repair per City Std Plan 223	SF	100
35	Replacement Planting	SF	26,955
36	Trench and Backfill	LF	14,170
37	30-day Plant Establishment	LS	1

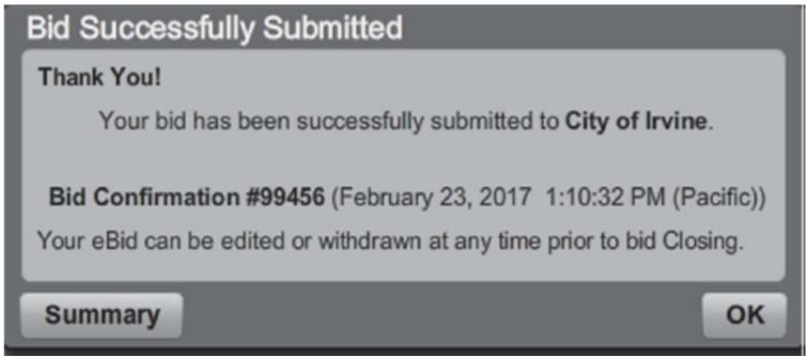
CITY OF IRVINE

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID No. 17-1244

INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS

In order to access the BidsOnline system and ensure successful online submission of your bid prices, follow these steps:

1. Go to https://www.planetbids.com/portal/portal.cfm?CompanyID=15927#
2. On the Vendor Portal page, log into the system (lower right hand corner of screen) with your assigned user name and password. (You must be registered in order to download documents and submit a bid.)
3. Click on "Bid Opportunities" and then on the Bid # and Description that you wish to bid on. The selected bid will open to allow you to access all tabs, documents and the pricing sheet.
4. Click on the “Documents & Attachment” tab to be sure you have downloaded all documents that are part of this bid.
    - *If you have not already downloaded all bid documents, you must download them now, in order to submit your bid. The screen will indicate which documents you've already downloaded.*
5. Click on the tab "Addenda & Emails" to be sure you have read and acknowledged all addenda that have been issued for this bid.
    - *The screen will display "yes" or "no" next to each addendum to indicate whether you have viewed and acknowledged it. If you have not previously acknowledged an addendum, do so now by clicking on the addendum to open and read it, then click on the "Acknowledge" button on the lower left hand corner of screen.*
6. To begin entering your bid, click on "Place eBid" on the lower right corner of the screen. The bid "Terms and Conditions" will pop up with a button for you to click "Accept" to acknowledge your agreement to the terms of the bid.
7. Enter the Respondee information on the “Detail” tab.
8. Click the “Attach” button on the “Attachments” tab, browse to your scanned Bid Submittal Documents, and upload them.
9. Go to the "Line Items" tab and enter your unit prices on each line. The system will calculate the extended costs and grand total for you.
10. When you have finished entering all pricing and attachments, click on the "Save" button. This saves your bid as a draft for you to review or revise as needed anytime up to the bid submittal deadline. When you are ready to submit your bid, click the "Submit" button. You will receive a confirming message that looks like this:



Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. As noted in the screen print above, if you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

Please begin entering your bid in sufficient time to complete and submit it prior to the stated deadline. The official closing time for the bid is determined, and controlled, by the electronic clock in the bid management system. Once the deadline is reached, the system will not allow any bids to be submitted, and any in process that are not completed will be rejected. The amount of time required to enter and submit your bid depends on the complexity of the bid and the processing speed of your server and internet connections.

Technical Support
In the event you encounter technical difficulties during the uploading process, please contact the Planet Bids, BidsOnline system team as shown below (M-F from 8 am to 5 pm):

support@planetbids.com or call 818-992-1771, ext. 0

Bid prices must be entered and the bid proposal packet must be uploaded to the BidsOnline system no later than the date and time indicated on the Notice Inviting Bids. No late bids will be accepted. No other method of bid submittal will be accepted.

CITY OF IRVINE

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID No. 17-1244

INFORMATION REQUIRED OF BIDDERS

In determining the lowest "responsible" bidder, consideration will be given to the general competency of the bidder in regard to the work covered by the Bid Proposal. To this end, each proposal shall be supported by a statement of the Bidder's experience on this form. **Failure of the Bidder to provide requested information in a complete and accurate manner shall render the bid non-responsive**. Additionally, the City reserves the right to disqualify or refuse to consider a proposal if a Bidder is determined to be non-responsible in accordance with Irvine Municipal Code § 2-12-103 "Determination of Contractor Non-Responsibility."

The Bidder is required to supply the following information. Use additional sheets as necessary.

1. Contact person name:_____ Email:_____

   Address: _____

   Telephone: (___)_____Fax: (___)_____

2. Type of firm (Individual, Partnership, or Corporation): _____
3. State Contractor's License Number and Classification:_____
4. DIR Registration Number: _____ Expiration Date_____
5. Number of years your firm has operated as a contractor: _____
6. Number of years your firm operated under its present business name: _____
7. List the **names and addresses** of all principals or officers authorized to bind your firm.

Name:	**Address:**

8. List any project(s) your firm has **failed to complete** within the last five years due to a termination of contract. For each project, list the type of project, client's name, contact person, current telephone number, email address, and provide a brief description of the grounds for the termination.

   Check appropriate box: None ☐ See list below ☐

Bidder's Name: _____

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

9. List projects of similar nature to the STREETSCAPE REHABILITATION your firm is **currently** constructing. For each project, list the type of project, contract amount, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Bidder's Name: _____

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

10. List projects of a similar nature to the STREETSCAPE REHABILITATION your firm has **completed** within the last five years. For each project, list the type of project, contract amount, date of completion, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Bidder's Name: _____

11. List the name of the person(s) **(A MINIMUM OF ONE)** who inspected the site of the proposed work for your firm.

Name:	**Date of Inspection:**

12. Complete the following in conformance with Labor Code Section 1725.5

Name of Subcontractor	Registered with DIR?	DIR Registration No.
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	

13. If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition or ability to perform the work.

    Failure to furnish information upon request will render the bid nonresponsive.

    All of the above statements regarding Contractor's experience and financial qualifications are submitted in conjunction with the Bid Proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

Bidder's Name: _____

THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS

The undersigned understands the contract time limit allotted for the completion of the work required by the Contract is **One Hundred Twenty (120) Working Days** (excluding plant establishment) and **One Hundred Fifty (150) Working Days** (including plant establishment).

The undersigned agrees, if awarded the Contract, to sign the Contract and furnish the necessary insurance certificates and bonds within ten (10) days of the date specified in the Notice of Award of Contract, not including Saturdays, Sundays and legal holidays, and to begin work within ten (10) Working Days from the date specified in the City's Notice to Proceed. Contract time accounting shall begin on the date shown in the Notice to Proceed.

Accompanying this Bid Proposal is **(check appropriate box)**:

☐ **Cash** ☐ **Cashier's Check** ☐ **Certified Check** ☐ **Bid Bond**

Sign Here if Individual:

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Co-Partnership:

Co-Partnership Name of Firm: _____

(Address) _____

_____

Members Signing:

(Signature) _____

(Print Name) _____

(Address) _____

_____

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Corporation:

(Name of Corporation) _____

(Address) _____

_____

Officers of Corporation Signing:

(Signature) _____

(Print Name) _____

(Title) _____

And

(Signature) _____

(Print Name) _____

(Title) _____

If executed by other than President and Secretary of the Corporation, attach a certified copy of resolution authorizing signature on behalf of the Corporation.

Affix notary's acknowledgement

LIST OF SUBCONTRACTORS

The Bidder shall list each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater. Complete columns (1) and (2) and submit with the bid. Complete columns (3) and (4) and submit with the bid or hand-deliver to the Receptionist for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207 within 24 hours after the bid opening. Failure to provide complete information in columns (1) through (4) within the time specified shall render the bid non-responsive.

Subcontractors listed must not be debarred from performing the designated work.

BUSINESS NAME and LOCATION (1)	CONTRACTOR LICENSE NUMBER (2)	BID ITEM NUMBERS (3)	PERCENTAGE OF BID ITEM SUBCONTRACTED (4)*

Information must be typed or clearly printed.

*** If you are subcontracting a whole bid item insert one hundred percent (100%), if less insert actual percentage.**

NON-COLLUSION DECLARATION-CONTRACTOR
To be Executed by Bidder and Submitted with Bid
City of Irvine Bid No.17-1244

The undersigned declares:

I am the _____ [title] of _____[company name], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date], at _____[city], _____[state].

_____
Signature

_____
Print Name

FORM OF BID BOND

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601

(10% of the Proposal Amount)

KNOW ALL MEN BY THESE PRESENTS that we _____ _____ as Principal, and _____ _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ Dollars ($_____), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal submitted to the City a certain Bid Proposal, attached hereto and hereby made a part hereof, to enter into a contract in writing for the **STREETSCAPE REHABILITATION, CIP 351501 & CIP 351601** and will furnish all required certificates of insurance and bonds as required by the Contract.

NOW THEREFORE, if said Bid Proposal shall be rejected; or in the alternate, if said Bid Proposal shall be accepted, and the Principal shall execute and deliver a contract in the prescribed Form of Contract, shall deliver certificates evidencing that the required insurance is in effect and shall execute and deliver Performance and Payment Bonds in the forms prescribed, and shall in all other respects perform the Contract created by the acceptance of said Bid Proposal, then this obligation shall be void; otherwise this obligation shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. In the event suit is brought upon this bond by City and judgment is recovered, Surety shall pay all costs incurred by City in said suit, including a reasonable attorney's fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by an extension of the time within which the City may accept such a Bid Proposal; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

FALSE CLAIMS

Bidder shall complete the **False Claims Act Certification** below or in the alternative, provide the information requested under **False Claims Act Violations** below. **Failure to certify or provide the requested information shall render the bid non-responsive.**

"False Claims Act" as used herein is defined as either or both the Federal False Claims Act, 31 U.S.C. § 3729, *et seq*., and the California False Claims Act, Government Code § 12650, et seq.

FALSE CLAIMS ACT CERTIFICATION

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act as defined above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

FALSE CLAIMS ACT VIOLATIONS

With regard to any determinations by a tribunal or court of competent jurisdiction that the False Claims Act, as defined above, has been violated by (1) the Contractor submitting this Bid Proposal or (2) the qualifying person licensed by the State Contractors License Board to perform the work described in this Bid Proposal, shall provide on a separate sheet the following information: (1) the date of the determination of the violation, (2) the identity of the tribunal or court, (3) the identity of the government contract or project involved, (4) the identity of the government department involved, (5) the amount of fine imposed, and (6) any exculpatory information of which the Agency should be aware.

CIVIL LITIGATION AND ARBITRATION HISTORY

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

For five (5) years preceding the submittal date of this Bid Proposal, identify civil litigation and arbitration arising out of the performance of a construction contract within the State of California in which the (1) Contractor submitting this bid proposal or (2) the qualifying person licensed by the State Contractors Licensing Board to perform the work described in this Bid Proposal was a named as a party in a lawsuit brought by or against the project owner or any action to confirm, vacate or modify an arbitration award involving an owner.

CIVIL LITIGATION AND ARBITRATION CERTIFICATION

If the Bidder has no civil litigation and arbitration history to report as described above, complete the following:

I _____ certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been involved in civil litigation and arbitration as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

Do not include litigation and arbitration which are limited solely to enforcement of mechanics' liens or stop notices. Provide on a separate sheet (1) the name and court case identification number of each case, (2) the jurisdiction in which it was filed, and (3) the outcome of the litigation, e.g. whether the case is pending, a judgment was entered, a settlement was reached, or the case was dismissed.

CRIMINAL CONVICTIONS

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

CRIMINAL CONVICTION CERTIFICATION

If the Bidder has no criminal convictions to report as described above, complete the following:

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been convicted of a criminal violation as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

For the five (5) years preceding the date of this Bid Proposal is due, identify on a separate sheet any criminal conviction in any jurisdiction in the United States for a violation of law arising out of the performance of a construction contract (1) by the Contractor submitting this Bid Proposal or (2) by the qualifying person licensed by the State Contractors License Board to perform the work described in the Bid Proposal.

Provide on the following page labeled “Criminal Convictions Information.” (1) the date of conviction, (2) the name and court case identification number, (3) the identity of the law violated, (4) the identity of the prosecuting agency, (5) the contract or project involved, (6) the punishment imposed, and (7) any exculpatory information of which the Agency should be aware.

VIOLATION OF LAW OR A SAFETY REGULATION

Has the Bidder, any officer of the Bidder, or any employee who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of a law or a safety regulation?

☐ **Yes** ☐ **No**

If the answer is yes, explain the circumstances in the following space.

Name of bidder (print)	Signature
Address	State Contractors' License No. & Classification
City Zip Code	Telephone

CONSTRUCTION CONTRACT
FOR CAPITAL IMPROVEMENTS

CITY OF IRVINE
STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID NO. 17-1244

This Contract made and entered into this _____ day of _____, 20__, by and between City of Irvine, a municipal corporation of the State of California, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

W I T N E S S E T H:

That the CITY and the CONTRACTOR, for the consideration hereinafter named, mutually agree as follows:

1. The complete Contract includes all of the Contract Documents, which are incorporated herein by this reference, to wit:
    a) Permits and Agreements
    b) Contract
    c) Addenda
    d) Instructions to Bidders, Proposal Requirements and Conditions
    e) Special Provisions
    f) Contract Plans
    g) Standard Plans
    h) Standard Specifications
    i) Reference Specifications

    The Contract Documents are complementary, and that which is required by one shall be as binding as if required by all.

2. CONTRACTOR shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation services required for the following work of improvement:
    Conversion of existing potable irrigation systems to recycled water, removing and retrofitting irrigation components, removal and replacement of irrigation controllers and irrigation systems, clearing and grubbing, landscape planting and other items not mentioned here, but are required by the plans and the Special Provisions.

3. CONTRACTOR agrees to perform all the said work and furnish all the said materials at his own cost and expense that are necessary to construct and complete in strict conformance with Contract Documents and to the satisfaction of the Engineer, the work hereinafter set forth in accordance with the Contract therefore adopted by the City Council and as prepared by TATSUMI AND PARTNERS, INC., 49 DISCOVERY, SUITE 120, IRVINE, CA 92618.

4. CITY agrees to pay and CONTRACTOR agrees to accept in full payment for performance of this work of improvement as described, the stipulated sum of

_____

($_____) the "Contract Price."

CITY agrees to make progress payments and final payment in accordance with the method set forth in the Special Provisions.

5. CONTRACTOR agrees to commence construction of the work provided for herein within ten (10) Calendar Days after the date specified in the Notice to Proceed, and to continue diligently in strict conformance with Contract Documents and without interruption, and to complete the construction thereof within **One Hundred Twenty (120) Working Days** after the date specified in the Notice to Proceed.

The CONTRACTOR shall diligently prosecute all the work (including plant establishment) to completion before the expiration of **One Hundred Fifty (150) Working Days** from the date specified in the Notice to Proceed.

6. Time is of the essence of this Contract, and it is agreed that it would be impracticable or extremely difficult to ascertain the extent of actual loss or damage which the CITY will sustain by reason of any delay in the performance of this Contract. It is, therefore, agreed that CONTRACTOR will pay as liquidated damages to the CITY the following sum: Two Thousand Two Hundred Fifty Dollars ($2,250) per Calendar Day, for each and every Calendar Days delay in finishing the Work except plant establishment work in excess of the number of Working Days prescribed above. The CONTRACTOR shall pay to the CITY the sum of Five Hundred Dollars ($500) per Calendar Day, for each and every Calendar Days delay in completing the plant establishment work in excess of the number of Working Days prescribed above. In no case will liquidated damages be assessed more than Two Thousand Two Hundred Fifty Dollars ($2,250) per day. If liquidated damages are not paid, as assessed by the CITY, the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under this Contract in addition to any other remedy available to CITY. By executing this Contract, CONTRACTOR agrees that the amount of liquidated damages is reasonable and shall not constitute a penalty.

7. In accordance with State of California Senate Bill No. 854, CONTRACTOR will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. CONTRACTOR shall notify the CITY in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that CONTRACTOR'S or any of its SUBCONTRACTOR'S DIR registration status has been suspended, revoked, expired, or otherwise changed.

8. CONTRACTOR will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, a copy of which is on file in the office of the City Clerk of the City of Irvine. Federal prevailing wage rates apply for federally funded

projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.

9. CONTRACTOR shall be subject to the penalties in accordance with Labor Code of § 1775 for each worker paid (either by him or by any subcontractors under him) less than the prevailing rate described above on the work provided for in this Contract.

10. CONTRACTOR and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the CONTRACTOR and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the CONTRACTOR to penalty and forfeiture provisions of the Labor Code § 1813.

11. CONTRACTOR will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.

12. CONTRACTOR, by executing this Contract, hereby certifies:

> "I am aware of, and will comply with the Labor Code § 3700 by securing payment for, and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the Agency before execution of the Contract. The CITY, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the CONTRACTOR to comply with this paragraph."

CONTRACTOR further agrees to require all subcontractors to carry Workers' Compensation Insurance as required by the Labor Code of the State of California.

13. CONTRACTOR shall, concurrent with the execution of this Contract, furnish two bonds approved by the CITY, one in the amount of One Hundred Percent (100%) of the Contract Price, to guarantee the faithful performance of the work "Performance Bond", and one in the amount of One Hundred Percent (100%) of the Contract Price to guarantee payment of all claims for labor and materials furnished "Payment Bond." This Contract shall not become effective until such bonds are supplied to and approved by the CITY.

14. CONTRACTOR shall, prior to commencing work, furnish certificates evidencing compliance with all requirements of the Contract Documents pertaining to insurance.

15. Any amendments to any of the Contract Documents must be in writing executed by the CONTRACTOR and the CITY. Any time an approval, time extension, or consent of the CITY is required under the Contract Documents, such approval, extension, or consent must be in writing in order to be effective.

16. This Contract contains all of the agreements and understandings of the parties and all previous understandings, negotiations, and contracts are integrated into and superseded by this Contract.

17. In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.

18. The persons executing this Contract on behalf of the parties hereto warrant that they are duly authorized to execute this Contract on behalf of said parties and that, by so executing this Contract, the parties hereto are formally bound to the provisions of this Contract.

19. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.

20. In performing its obligations and duties under this Contract, each party shall comply with all applicable local, state, and federal laws, regulations, rules, standards and ordinances.

21. In the event any action is brought between the parties hereto relating to this Contract or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.

22. This Contract may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

23. This Contract is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, the said CONTRACTOR and the Director of Public Works, City Manager, Mayor and City Clerk of the CITY have caused the names of said parties to be affixed hereto, the day and year first above written.

_____

CONTRACTOR

(If Corporation, 2 signatures are required)

By _____

_____

Print Name

Title

By _____

Print Name

Title

CITY OF IRVINE
A Municipal Corporation

Donald P. Wagner
Mayor of the City of Irvine

Sean Joyce
City Manager of the City of Irvine

Manuel Gomez
Director of Public Works

ATTEST:

Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

Jeffrey Melching

PERFORMANCE BOND

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID NO. 17-1244

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the original terms thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void otherwise this obligation shall remain in full force and effect.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modifications of the Contract Documents and/or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the contract documents and/or of the work to be performed thereunder.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, and all to be taxed as costs and included in any judgment rendered by a court of law.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

PAYMENT BOND

STREETSCAPE REHABILITATION
CIP 351501 & CIP 351601
BID NO. 17-1244

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract, attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of each contract that may hereafter be made, then this obligation shall be void, otherwise this obligation shall remain in full force and effect.

The condition of this obligation is such that, if said Principal or his subcontractors, or heirs, executors, administrators, successors, or assigns thereof, shall fail to pay any of the persons named in the Civil Code § 9100 for any material used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or shall fail to pay any amount due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant or any amount required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his subcontractors with respect to such work and labor, then said Surety will pay and, also, in case suit is brought upon the bond, will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of all persons named in the aforesaid Civil Code § 9100 to give a right of action to them or their assigns in any suit brought upon the bond.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the Contract Documents and/or of the work to be performed thereunder.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

SPECIAL PROVISIONS

A. THESE ADDITIONS, DELETIONS, AND AMENDMENTS MODIFY THE SPECIFICATIONS IN THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.

B. THESE ADDITIONS, DELETIONS, AND AMENDMENTS SHALL TAKE PRECEDENCE IN THE EVENT OF A CONFLICT WITH ANY STANDARD SPECIFICATIONS.

C. AS A CONVENIENCE, THESE ADDITIONS, DELETIONS, AND AMENDMENTS HAVE BEEN ARRANGED IN A FORMAT THAT PARALLELS THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.

PART 1 - GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS

REVISE as follows:

1-1 GENERAL. *ADD the following term:*

The word *provide* shall mean furnish and install.

1-2 TERMS AND DEFINITIONS. *MODIFY to ADD the following:*

Acceptance, Final Acceptance – Formal action by the Agency acknowledging the Work is complete.

Agency/Board/City – The City of Irvine, a municipal corporation.

Agency Representative – The person or engineering/architectural firm Agency authorizes to represent it during the performance of the Work by the Contractor and until Final Acceptance. The Agency Representative means the Agency Representative or his assistants.

Calendar Day – The 24-hour day denoted on the calendar.

Calendar Month – The period including the first through the last day of a month.

City – See Agency.

Clarification – Verbal or written interpretation of Contract Documents by the Agency Representative to clarify intent, procedures, materials or processes with no change in contract sum or time.

REPLACE the definition for "Engineer" with the following:

Engineer – The City Engineer acting either directly or through the Agency Representative.

Field Order – Authorization by Agency Representative to proceed with Change Order work after completion of negotiations, but before the issuance of the Change Order.

Laboratory – The laboratory authorized by the Agency or the Agency Representative to test material and work involved in the project.

Major Bid Item – A single Contract item constituting ten percent (10%) or more of the original Contract Price.

Request for Quotation – Contemplated revision of Contract Documents by the Agency requesting detailed information from the Contractor on impacts to contract sum or contract time.

State Standard Specifications – Standard Specifications issued by the State of California, Department of Transportation, 2015.

Traffic Control Devices – All signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway, by authority of the Engineer.

1-3. ABBREVIATIONS

1-3.2 Common Usage. *MODIFY to ADD the following:*

Abbreviation	Word or Words
CSMP	Construction Site Monitoring Program
DBE	Disadvantaged Business Enterprise
ESA	Environmentally Sensitive Area
HMA	Hot Mix Asphalt
NOI	Notice of Intent
SWMP	Storm Water Management Plan
SWRCB	State Water Resources Control Board
WPCP	Water Pollution Control Program
WDID	Waste Discharge Identification Number

DELETE the abbreviation of MUTCD and SUBSTITUTE with the following:

MUTCD	California Manual on Uniform Traffic Control Devices

1-3.3 Institutions. *MODIFY to ADD the following:*

Abbreviation	Word or Words
AI	The Asphalt Institute
AIA	American Institute of Architects
APWA	American Public Works Association
AREMA	American Railway Engineering and Maintenance of Way Association
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
CRSI	Concrete Reinforcing Steel Institute
NFPA	National Fire Protection Association
PCA	Portland Cement Association
SSPC	Steel Structures Painting Council
UBC	Uniform Building Code, Pacific Coast Building Officials Conference of the International Conference of Building Officials

SECTION 2 - SCOPE AND CONTROL OF THE WORK

REVISE as follows:

2-2 ASSIGNMENT. *MODIFY to ADD the following:*
The performance of the Contract may not be assigned, except upon the written consent of the Agency. Consent will not be given to any proposed assignment that would relieve the original Contractor or its Surety of their responsibilities under the Contract, nor will the Agency consent to any assignment of any part of the Work under the Contract.

Assignment of this Contract shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

2-3 SUBCONTRACTS.

2-3.1 General. *MODIFY to ADD the following:*
If the Contractor subcontracts any part of this Contract, the Contractor shall be as fully responsible to the Agency for the acts and omissions of his subcontractor as he is for the acts and omissions of persons directly employed by him. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Agency. The Contractor shall bind every subcontractor to be bound by the terms of the Contract Documents as applicable to his work.

Debarred contractors shall not be employed on the Work pursuant to the provisions of Labor Code § 1777.1 and the City of Irvine Council Ordinance No. 08-10. The Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site: http://www.dir.ca.gov/dlse/debar.html

A list of individuals, firms and organizations debarred, suspended or who have voluntarily excluded themselves from Federal Procurement and Non-Procurement Programs is maintained by the US General Services Administration. This excluded parties list is available from the website: http://www.sam.gov

In accordance with SB 854, the Contractor and each of its subcontractors shall maintain a valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

Prior to including a subcontractor's name on the bid, the Contractor shall be responsible for verifying that each of its subcontractors are properly licensed and not debarred from performing the designated work.

This requirement shall be enforced as follows: Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the Contract.

If any subcontractor or person employed by the Contractor is deemed by the Engineer to be incompetent or to act in an improper manner, at the request of the Engineer, they shall be dismissed immediately from the job and shall not be employed again on the Work.

A copy of each subcontract is required to be filed with the Agency before the subcontractor begins work. Each subcontract shall contain a reference to the Contract between the Agency and the Contractor, and the terms of that Contract and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract shall provide for its annulment by the Contractor at the order of the Agency if in the Agency's opinion the subcontractor fails to comply with the requirements of the Contract.

2-3.2 Self Performance. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall perform, with its own organization, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts, and at least 50 percent of the Contract Price on all other Public Works contracts except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

The provisions in 2-3.2 of these Special Provisions require that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original Contract Price is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal Aid Construction Contracts" of these Special Provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

2-3.3 Status of Subcontractors. *MODIFY to ADD the following:*
The City will not conduct business with an individual, firm or organization, and the Contractor shall not employ or otherwise use any subcontractor, supplier, or equipment vendor at any tier that is on the City's debarment list, the Department of Industrial Relations debarment list, or on the US General Services Administration "List of Parties Excluded from Federal Procurement and Non Procurement Programs."

2-5 PLANS AND SPECIFICATIONS.

2-5.1 General. *ADD the following after the 2nd paragraph:*
All work of the Contract including, but not limited to, the general nature and character of the work area and conducting of Contractors' operations shall be performed in accordance with the Standard Specifications for Public Works Construction, 2015 edition, and all supplements thereto, except as modified in these Special Provisions and as follows:

> Work to be performed which is directly related to the construction and/or modification of traffic, striping, signing, markings or signals; work within State

right of way; and, work which are directly related to the construction of bridges and bridge appurtenances shall be performed in accordance with the State Standard Specifications, current edition as of bid date.

As applicable, unless modified elsewhere in these Special Provisions, Work of the Contract shall conform to current editions of: Uniform Building, Plumbing, Mechanical Codes; Uniform Fire Code; National Electrical Code; and, City of Irvine amendments thereto.

All work shall be performed in accordance to the Standard Specification for Public Works Construction “Greenbook” (2015 Edition, with all current supplements), the California Building Code (2013 Edition) with City Amendments, the California Electrical Code (2013 Edition) with City Amendments, the California Plumbing Code (2013 Edition) with key amendments, California Green Building Standards Code (2013 Edition), Building Energy Efficiency Standards (2013 Edition), California Playground Safety Regulations; All City of Irvine Codes & Ordinances, City of Irvine’s Grading Manual, City of Irvine’s Standards and Design Manual; City of Irvine’s Park/Public Facility Standards; City of Irvine’s Construction Site Security Requirements, Americans with Disabilities Act (ADA), Chapter 11B Title 24 of the California Code of Regulations; California Public Contract Laws; these Specifications, Attachments, and the Construction Drawings, and all applicable requirements.

DELETE last paragraph in its entirety and SUBSTITUTE with the following:

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Specifications and the Plans or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, the Contractor shall promptly notify the Agency of such discrepancy, error, or omission. If the Contractor observes that any plans or specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Agency in writing of such conflict.

The Agency, on receipt of any such notice, will investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after its discovery of such an error, discrepancy, or conflict that is directly or indirectly affected by such error, discrepancy, or conflict, will be at its own risk and it shall bear all cost arising therefrom.

The Agency will provide, free of charge, three (3) copies of Plans and Special Provisions for the Contractor and one (1) copy of Plans and Special Provisions for each subcontractor listed in the Bidder's Proposal. Any Plans or Special Provisions required by the Contractor/subcontractor in addition to the above can be provided by Agency at Contractor's expense. The Contractor shall keep one set of Plans and Special Provisions in good order and available to the Agency Representative at the site of the Work.

2-5.2 Precedence of Contract Documents. *DELETE the order of precedence and SUBSTITUTE with the following*:

a) Permits and Agreements

b) Change Orders and/or Supplemental Agreements; whichever occurs last

c) Contract
d) Addenda
e) Instructions to Bidders, Proposal Requirements and Conditions
f) Bid/Proposal
g) Special Provisions
h) Contract Plans
i) Standard Plans
j) Standard Specifications
k) Reference Specifications

ADD:

2-5.2.1 Interpretation of Plans and Specifications. Figured dimensions on Plans shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Specifications shall govern as to materials, workmanship, and installation procedures. Plans and Specifications requiring higher quality material or workmanship shall prevail. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Specifications, reference shall be made to Engineer whose decision thereon shall be final.

2-5.3 Submittals.

2-5.3.1 General. *MODIFY to ADD the following:*
The review period begins a new upon each submittal or resubmittal.

In providing specified submittals, the Contractor certifies that they are complete in all respects and all materials, equipment, and other work shown thereon conforms to the Contract Documents.

Where a manufactured item is designed or engineered by the manufacturer, fabricator, subcontractor, consultant or designee, the drawings and supporting calculations shall be stamped and signed by an engineer registered by the State of California executing the design within the scope of his registration. Unless otherwise accepted by the Engineer, data shall be submitted only by the prime Contractor. Data that, in the opinion of the Engineer, are incomplete or have not been checked by the prime Contractor or are illegible will be considered as not complying with the Contract requirements and will be returned to the Contractor for resubmittal in the proper form. The City may make this determination at any time during the review period.

Data shall be submitted in a format similar to the arrangement of the applicable section(s) of the Specifications unless otherwise specified. Any submittal not following the format specified, and not conforming to the requirements listed below, will be returned for resubmittal without review.

a) Data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices, the external connections, anchorages, and supports required,

performance characteristics, dimensions needed for installation and correlation with other materials and equipment, and all additional information as required in the detailed section(s) of the Contract Documents. Identify field dimensions; show relation to adjacent or critical features, work or products.

b) Calculations to support the adequacy of the design in meeting specified performance ratings or requirements shall be submitted when required by the Specifications.

c) Each drawing or data sheet shall be clearly marked with the name of the project, the Contractor's name, and references to applicable Specification paragraphs and Plan sheets. Submittals containing multiple drawings or data sheets shall be collated prior to submittal for review.

d) Data sheets, catalog cuts or drawings showing more than the particular item under consideration shall be marked to cross out all but the applicable information. Submit only pertinent pages; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

e) Data submitted shall include drawings showing wiring and/or pipe layouts. Any changes proposed by the Contractor shall be stated in a cover letter and essential details of such changes shall be clearly shown in the data submitted.

f) Present in a clear and thorough manner. Title each drawing with project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.

g) Provide manufacturer's preparation, assembly and installation instructions.

h) Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Engineer's selection.

i) Submit samples to illustrate functional characteristics of products, including parts and attachments. Label each sample with identification required for transmittal letter. Approved samples which may be used in the Work are indicated in the Specification section.

j) Provide field samples of finishes for the Work, at location acceptable to Agency Representative, as required by individual Specifications section. Install each sample complete and finished. Finishes in place that have been accepted by the Agency Representative may be retained in completed work.

Submittals shall be accompanied by a letter of transmittal listing the contents of the submittal. Drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with sufficient time for Agency's review and in orderly sequence in accordance with the progress schedule to cause no delay in prosecution of the Work. Drawings shall be submitted on 11"x17" or 24"x36" sheet sizes only. Any submittal not accompanied by such a transmittal, or where all applicable items on the form are not complete, will be returned for resubmittal.

A separate letter of transmittal shall be used for each specific item or class of materials or equipment for which a submittal is required. Transmittal of shop drawings on various items using a single letter of transmittal will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. Submittals transmitted by facsimile will not be accepted.

The Agency will return any submittal sent (1) without a transmittal letter, (2) with an incomplete form, or (3) by facsimile.

The Contractor shall assign a unique sequential number to each submittal package, which shall be clearly written in the space provided on the transmittal letter. This number shall be used in all correspondence to the Agency when referencing to a particular submittal. The Contractor shall be responsible for ensuring the same submittal number is not assigned to different submittal packages.

Resubmittals shall incorporate the original submittal number followed by the revision number (i.e., the first resubmittal of submittal #1 is numbered 1R1, the second 1R2, etc.). The Agency will return improperly numbered submittals without review. The Contractor shall indicate on the transmittal letter that either no exceptions to the Contract Documents are taken or deviations are submitted. All deviations indicated shall be listed on the transmittal letter and the Contractor shall be solely responsible for any omitted deviations. If any deviations are omitted, the Agency will return the submittal and the engineering data without review for resubmittal. Any consequences from the resulting delay shall be fully borne by the Contractor.

The Engineer's review of the Contractor's submittals will cover only general conformity to the Contract Documents. The Engineer's acceptance of drawings returned marked NO EXCEPTION TAKEN or RESUBMITTAL NOT REQUIRED (CORRECTIONS ARE NOTED) shall not constitute a blanket approval of dimensions, qualities, and details of the materials, equipment, device, or item shown, and does not relieve the Contractor from any responsibility for errors, omission or deviations from conforming to the Contract Documents. The Agency reserves the right to subsequently reject any previously accepted equipment, material, and/or construction method that deviates from the Contract Documents. When the drawings and data are returned marked CORRECT AND RESUBMIT, the corrections shall be made as noted thereon and as instructed by the Engineer, resubmittal shall be made in the same manner as the original submittal.

If the Engineer rejects the submittals, the Contractor is responsible for any subsequent time delays at no additional compensation from the Agency. Subject to these requirements, drawings and data, after final processing by the Engineer, shall become a part of the Contract Documents, and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the Engineer. In the event of conflict between accepted submittals and the other Contract Documents, the most stringent requirements shall apply unless the Agency has agreed in writing to less stringent requirements in response to a deviation listed on a submittal letter of transmittal.

No portion of the work requiring a submittal shall be commenced until the submittal has been reviewed by the Engineer and returned to the Contractor with a notation indicating that resubmittal is not required.

The review by the Engineer is only of general conformance with the design concept of the project, and general compliance with the Contract Documents and shall not be construed as relieving the Contractor of these full responsibilities for providing materials, equipment, and work required by the Contract; the proper fitting and construction of the Work; the accuracy and completeness of the submittals; selecting fabrication processes and techniques of construction; and performing the Work in a safe manner.

2-6 WORK TO BE DONE. *ADD the following after the 1st paragraph:*
The Contractor shall leave the Work area in a neat condition. Any work not shown in the Plans or Specifications but necessary to complete the Work according to law and governmental codes and regulations shall be performed by the Contractor as if in the Plans and Specifications.

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the Work. Where such obstructions consist of improvements not required by law to be removed by the Agency thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense.

2-7 SUBSURFACE DATA. *ADD the following after the 1st paragraph:*
After completion of the rough grading and prior to soil preparation, the Contractor shall provide the testing of planting soils and composted organic humus materials by and independent agronomic oils testing laboratory that is a member of the California Association of Agricultural Labs. Representative soil samples shall be taken in the field and a written report shall be prepared by the soil scientist that shall include recommendations for soil amendments, pre-plant fertilization, hydromulch slurry, and post-maintenance fertilization program.

Soil preparation specifications shall be prepared based on the test results and recommendations and must be approved by the City prior to soil preparation.

Soil tests shall be performed after soil preparation to confirm that soil preparation was performed in compliance with pre-plants soils report and specifications. Compliance of Contractor's work with soil preparation specifications shall be determined solely by the City.

2-8 RIGHT OF WAY. *DELETE the 1st sentence and SUBSTITUTE with the following:*
Rights of way, easements, agreements, licenses, or rights of entry (all referred to as right of way) for the Work have been provided by the Agency. Temporary right-of-way to construct one or more portions of the Work may also have been acquired by the Agency. If temporary right of way was acquired, the documents or their contractual terms and obligations are included in the Contract Documents. The Contractor shall comply with all the terms and obligations related to the physical use of the temporary right of way and its eventual return of the property to the owner. The Contractor shall schedule the Work that may include landscape establishment, maintenance periods, and final acceptance within the temporary right of way to start and finish within the time allotted in each temporary right of way agreement. Should the Work be delayed through no fault of the Agency, the Contractor shall be responsible for all costs incurred by the Agency to extend use of the temporary right of way.

MODIFY to ADD the following:

Work in the public right of way shall be done in accordance with the requirements of the permit issued by the public agency in whose right of way the Work is located in addition to conforming to the Contract Documents. If a permit or traffic control plan is not required, the Work shall conform to the standards set forth in the MUTCD.

The Contractor shall not allow his employees to use private property for any reason or to use water or electricity from such property without providing the City written permission from the owner. The Contractor shall comply with all applicable federal, state and local laws, ordinances, codes and regulations in performing any work or doing any activity on lands outside the public rights of way.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Agency Representative and each of their officers, employees, and agents from all claims or suits for damages occasioned by such work or activity, whether done according to this section and with permission from the Agency or in violation of this section without permission from the Agency. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claims or suits.

The Contractor shall comply with City of Irvine Municipal Code § 5-9-521 Construction Site and Vacant Property Security, and be fully responsible for locating and obtaining permission to use equipment yards or material storage site(s). The Contractor shall assume full responsibility and costs for property rental, site preparation, maintenance and cleanup in a manner satisfactory to the City and the property owner.

If, through the failure of the Agency to acquire or clear right of way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, the Contractor will be paid an amount as the Engineer may find to be a fair and reasonable compensation for such part of the Contractor's actual loss as, in the opinion of the Engineer, was unavoidable, determined as follows:

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for as provided in 3-3 with the following exceptions:

a) The right of way delay factor for each classification of equipment shown in the State of California, Department of Transportation publication entitled “Equipment Rental Rates and Labor Surcharge,” current edition at the time of bid opening will be applied to such equipment rental rate.

b) The time for which such compensation will be paid will be the actual normal working time during which such delay condition exists, but in no case will exceed eight (8) hours in any day.

c) The days for which compensation will be paid will be the Calendar Days, excluding Saturdays, Sundays and legal holidays, during the existence of such delay.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of men, cost of extra moving of equipment, and cost of longer hauls. Compensation for idle time of equipment will be determined, as provided herein, and compensation for idle time of men will be determined as provided in 3-3.

If the performance of the Contractor's work is delayed as a result of the failure of the City to acquire or clear right of way, an extension of time determined pursuant to the provisions in 6-6 will be granted.

2-9 SURVEYING.

2-9.2 Survey Service. *DELETE the 1st sentence in the 1st paragraph and SUBSTITUTE with the following:*
The Agency will engage a licensed land surveyor or civil engineer registered in the State of California to perform surveying and calculations required by the Work of this Contract. All survey requests and directions to the survey team will be handled through the Agency Representative.

DELETE the last sentence in the 1st paragraph and SUBSTITUTE with the following:

Staking will be in accordance with Chapter 12 “Construction Surveys” of the State of California, Department of Transportation “Survey Manual.” A copy of the Manual is available at http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/12_Surveys.pdf.

Any construction stakes required in addition to those listed in the “Survey Manual”, or any re-staking required by loss of stakes, or additional costs encountered by significant delays or conditions which cause the use of more difficult survey methods during field operations and which are, in the judgment of the Agency, caused by interference of Contractors' operations, equipment or materials, shall be paid for by the Contractor at the hourly rate schedule of the Agency's surveying firm. Costs shall be deducted from any monies due or to become due the Contractor and any delays due to the replacement or restoration of stakes shall be the responsibility of the Contractor.

The Contractor shall submit to the Agency Representative a completed City of Irvine construction staking form with an assigned sequential number, description of specific items, locations and date required, together with supplemental drawings and/or data as necessary to facilitate surveying as required.

ADD:

2-9.5 Conformity with Contract Documents. The Work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Contract Documents and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Engineer shall govern.

2-10 AUTHORITY OF BOARD AND ENGINEER. *MODIFY to ADD the following:*
The Contractor is subject to the provisions of Government Code § 8546.7, which provides that this Contract and related documents are subject to the examination and audit of the State Auditor, at the request of the Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Contract.

The Agency reserves the right to audit the Contractor's books, records, and documents related to the Contractor's performance and the Contractor's compliance with all of the terms and conditions of this Contract at any time. Upon request by Agency, Contractor shall prepare and submit to Agency any reports concerning Contractor's performance of the services rendered under this Contract. With 72 hours advance written notice delivered to Contractor, Agency shall have access to the books, records and documents of Contractor related to Contractor's performance of this Contract in the event any audit is requested.

All drawings, documents, and other materials prepared by Contractor in the performance of this Contract:

a) Shall be the property of Agency and shall be delivered at no cost to Agency upon request of Agency or upon the termination of this Contract, and

b) Are confidential and shall not be made available to any individual or entity without prior written approval of the Agency.

2-11 INSPECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
Inspection of the Work will be conducted by an Agency Representative and will include monitoring and enforcing compliance of materials, equipment, installations, workmanship, methods and requirements of the Contract Documents.

The Agency Representative shall, at all times, have safe access to the Work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the Work.

Whenever the Contractor varies the work hours in which inspection is required, the Contractor shall give at least two (2) Working Days written notice to the Agency Representative so that inspection may be made.

All installations which are to be backfilled or otherwise covered will be inspected by the Agency Representative prior to backfilling or covering. The Contractor shall give the Agency Representative a minimum of two (2) days advance notice prior to backfilling or covering any part of the Work.

Work or materials concealed or performed without the prior notice specified above, will be subject to such tests or exposure as may be necessary to prove to the satisfaction of the Engineer, that all materials used and the work done are in strict conformity with the Contract Documents. All labor and equipment necessary for exposing and testing shall be furnished and paid for by the Contractor. The Contractor shall replace, without additional cost to the Agency, any materials or work damaged by exposure or testing.

Defective work shall be made good at the Contractor's expense including any unsuitable materials and equipment that may have been previously inspected by the Agency Representative, and/or that payment therefore has been included in an estimate for payment.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all requirements of the Contract.

All submittals and correspondence between the Agency and the Contractor, related to inspection of the Work of this Contract, shall be directed to the Engineer.

ADD:

2-11.1 Inspection Requirements. The Contractor shall notify the Agency Representative a minimum of 48 hours before inspection is required.

a) Unless specified elsewhere in the Special Provisions, inspection of the Work will be provided by the Agency between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, exclusive of Agency holidays. Any inspections requested by or made necessary as a result of the actions of the Contractor beyond the hours stated above shall be paid for by the Contractor at the prevailing rate of 1-1/2 times the regular hourly wage rate, plus 21% for overhead costs.

   The Contractor shall submit a request to the Engineer for approval, a minimum five (5) Calendar Days, in advance of inspections requested by or made necessary as a result of the actions of the Contractor on Saturdays, Sundays or Agency and/or Federal holidays. The Contractor shall pay for these inspections at the prevailing rate of 1-1/2 times for Saturdays and 2 times the regular hourly wage rate for Sundays or Agency and/or Federal holidays plus associated overhead costs.

   For purposes of this section, the following holidays are observed by the Agency:

   New Year's Day
   Martin Luther King Jr. Day
   Presidents' Day
   Memorial Day
   Independence Day
   Labor Day
   Veterans Day
   Thanksgiving Day
   Day after Thanksgiving
   Christmas Eve
   Christmas Day

   A construction calendar showing the days that each of the above holidays will be observed is available upon request from the Engineer.

b) The Contractor shall telephone the designated Agency Representative at least two (2) Working Days prior to starting construction or resuming construction following suspension of the Work for any reason.

   Prior to commencing any work on the Contract, the Contractor shall submit a completed Inspection Overtime Permit form provided by the City of Irvine.

c) In addition to any inspection required by Codes and/or Ordinances or Contract Documents, Contractor shall notify the Engineer a minimum of 2 days prior to the permanent concealment of any materials or work. The following list is typical but not all inclusive of such required inspections:

   1) Foundation/subgrade material, footing and slab beds
   2) Reinforcing for concrete, masonry and plaster
   3) Contact surface of concrete forms

4) Concrete and masonry surfaces
5) Piping and conduit
6) Finish grade prior to paving, seeding or planting
7) All soil mixes prior to installation
8) All chemicals and amendments prior to installation or application

2-12 SPECIAL NOTICES. *MODIFY to ADD the following:*
Any notice required or given by one party to the other under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by a duly authorized representative of such party. Any such notices shall not be effective for any purpose whatsoever, unless served in the following manner:

a) If the notice is given to the Agency, by personal delivery or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to the Agency, postage prepaid and registered.
b) If the notice is given by the Engineer to the Contractor by personal delivery to said Contractor or to his authorized representative or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to said Contractor at his regular place of business or such other address as may have been established for the conduct of the work under this Contract, postage prepaid and registered.
c) If notice is given to the surety or any other person by personal delivery to said surety or other person, or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to such surety or person at the address of said surety or person last communicated by him to the party giving the notice, postage prepaid and registered.

ADD:

2-13 CORRESPONDENCE. Unless specified otherwise or requested by the Engineer, the use of facsimile (fax) machines or internet email for the transmittal of routine correspondence, including submittals, shall not be allowed. The City will allow the use of fax machines or internet email for urgent matters such as notification of change of conditions. Unless otherwise allowed by the Engineer, all faxes or internet email shall be directed to the Engineer. The fax number and internet email address for the Engineer will be provided at the pre-construction meeting. Faxes or internet email received after 2:00 p.m. shall be considered as being received the following working day. All faxes or internet email shall be followed up with a paper copy that is mailed to the Engineer on the same day the fax or internet email is forwarded. The Engineer will not accept any illegible faxed or internet email correspondence.

ADD:

2-14 CONTRACT COORDINATION. The Contractor shall coordinate scheduling, submittals, and the Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

In addition to weekly progress meetings, as required by the Agency, the Contractor shall hold coordination meetings and pre-installation conferences with Agency Representatives and subcontractors to assure coordination of Work.

Should the Agency exercise partial Acceptance or beneficial occupancy of premises, the Contractor shall coordinate access to site to complete work or to correct defective work and work not in strict conformance with Contract Documents to minimize disruption of Agency's activities.

SECTION 3 - CHANGES IN WORK

REVISE as follows:

3-1 CHANGES REQUESTED BY THE CONTRACTOR.

3-1.1 General. *ADD the following after the 1st paragraph:*
The Contractor may initiate changes by submitting a written Change Order Request to the Engineer containing:

a) Description of the proposed changes.

b) Statement of the reason for making the changes.

c) Reference applicable specifications sections and specific plans in support of the request.

d) Statement of the effect on the Contract Price and Contract time.

e) Statement of the effect on the work of separate subcontractors.

f) Documentation supporting any change in Contract Price or Contract time as appropriate.

3-2 CHANGES INITIATED BY THE AGENCY.

3-2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may issue a Change Order for modifications of Work including, but not limited to, the Plans, Specifications, character, quantity or time of Work. Change Orders shall be in writing and state the dollar value of the change or establish the method of payment, and any adjustment in the Contract time of completion.

The Engineer may order minor changes in the Work not involving an increase or decrease in the contract amount, nor involving a change in the time for completion but consistent with the purposes for which the works are being constructed. If the Contractor believes that any order for minor changes in the work involves changes in the Contract Price or time of completion, the Contractor shall not proceed with the minor changes so ordered and shall immediately, upon the receipt of such order, notify the Engineer in writing of his estimate of the changes in the Contract Price and time of completion he believes to be appropriate.

No payment for changes in the Work will be made and no change in the time of completion by reasons of changes in the Work will be made, unless the changes are covered by a written Change Order approved by the Agency in advance of the Contractor's proceeding with the changed work.

Once a Change Order is finalized and executed by both parties, the Contractor waives its right to seek any additional compensation for the work covered by the Change Order or any project impacts. The Contractor agrees that all Change Orders constitutes full payment for the work covered by the Change Orders, including all direct and indirect overhead expenses.

Notwithstanding any other provision in the Contract Documents, the Agency’s issuance of a Change Order shall not constitute a waiver by the Agency of, or preclude the Agency in any way from, asserting any claim with respect to the same, including but not limited to, a

claim of breach of contract or claim that the issued Change Order covers work included in the scope of Work set forth in the Contract Documents for which the Contractor was not entitled to any additional funds.

A Change Order is approved when the Agency signs the Change Order.

A Contract Change Order approved by the Engineer may be issued to the Contractor at any time. Should the Contractor disagree with any terms or conditions set forth in an approved Contract Change Order not executed by the Contractor, the Contractor shall proceed with the Change Order work in accordance with 3-5 of the Standard Specifications, and submit a written protest to the Engineer within fifteen (15) days after the receipt of the approved Contract Change Order. The protest shall state the points of disagreement citing the Specification references, quantities and costs involved. If a written protest is not submitted, payment will be made as set forth in the approved Contract Change Order, and that payment shall constitute full compensation for all work included therein or required thereby. Unprotested approved Contract Change Orders will be considered as executed Contract Change Orders.

The Engineer may initiate changes by submitting a Request for Quotation to Contractor. Such request will include detailed description of the change, products, and location of the change in the Work, supplementary or revised Plans and Specifications. Such request is for information only and is not an instruction to execute the changes, or to stop work in progress.

The Contractor shall support each quotation for a lump-sum proposal, and for each unit price that has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.

On request, the Contractor shall provide additional data to support time and cost computations, labor required, equipment required, products required, recommended source of purchase and unit cost, and quantities required, taxes, insurance and credit for work deleted from Contract, similarly documented, justification for any change in Contract time.

The Contractor shall support each claim for additional costs, and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information as follows:

a) Name of the Agency Representative who ordered the work, and date of the order.

b) Dates and times work was performed, and by whom.

c) Time record, summary of hours worked, and hourly rates paid.

d) Receipts and invoices for equipment used, listing dates and times of use, products used, listing of quantities, and subcontracts.

In lieu of a Request for Quotation, the Engineer may issue a written Field Order for the Contractor to proceed with a change for subsequent inclusion in a Contract Change Order. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change and will designate the method of determining any change in the Contract Price and any change in Contract time. Agency Representative will sign and date the Field Order as authorization for the Contractor to proceed with the changes. Contractor may sign and date the Field

Order to indicate agreement with the terms therein. Contractor shall proceed with the work so ordered prior to actual receipt of an approved Contract Change Order.

3-2.2 Contract Unit Prices.

3-2.2.1 General. *ADD the following after the 2nd paragraph:*
In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change, which together with all previous changes to that item, is not in excess of twenty-five percent of the total cost of such item based on the original quantity and Contract Unit Price.

3-2.2.2 Increases of More than 25 Percent. *MODIFY to ADD the following:*
If payment for units of a bid item that exceeds125 percent of the price shown on the Bid Item List is less than $5,000 at the unit price, the Engineer may not adjust the unit price unless asked to do so in writing by the Contractor.

3-2.4 Agreed Prices. *After the 1st sentence, ADD the following:*
Agreed prices shall be negotiated before commencement of the changed work.

3-3 EXTRA WORK.

3-3.2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
When the price for the extra work cannot be agreed upon prior to the commencement of the work, the Agency will pay for the extra work based on the accumulation of costs as provided herein.

3-3.2.2.3 Tool and Equipment Rental. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The rates to be used for determining equipment rental costs shall be those rates listed for such equipment in the State of California, Department of Transportation (Caltrans) publication entitled “Equipment Rental Rates and Labor Surcharge”, which is in effect on the date upon which the work is accomplished, regardless of ownership and any rental or other agreement entered into by the Contractor, if such may exist, for the use of such equipment. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, the Engineer will establish a suitable rental rate for such equipment. The Contractor may furnish any cost data, which might assist the Engineer in the establishment of such rental rate. Equipment Rental Rates and Labor Surcharge publication is available from Caltrans at http://www.dot.ca.gov/hq/construc/equipmnt.html. Rental time will not be allowed while equipment is inoperative due to breakdowns.

Operators of rented equipment will be paid for as provided in 3-3.

3-3.2.3 Markup.

3-3.2.3.1 Work by Contractor. *DELETE in its entirety and SUBSTITUTE with the following:*
The following percentages will be added to the Contractor’s costs as determined under 3-3.2.2 and shall constitute the markup for all overhead, increase in Contractor’s bonds, administrative expenses and profit on work by the Contractor:

a) Labor 20%

b) Materials 15%

c) Equipment Rental 15%

d) Other Items and Expenditures 15%

3-3.2.3.2 Work by Subcontractor. *DELETE in its entirety and SUBSTITUTE with the following:*
When any part of the extra work is performed by a subcontractor, of any tier, the markup established in 3-3.2.3.1 shall be applied to the subcontractor's actual cost of such work. Contractor markup on subcontractor work shall be limited to five percent .

No payment shall be made for any item not set forth in 3-3.2.3.1 and 3-3.2.3.2, including without limitation, Contractor's overhead, general administrative expense, supervision or damages claimed for delay in prosecuting the remainder of the work.

This provision shall not be construed to preclude the recovery of damages by the Contractor stemming from delay for which the Agency is responsible, which is unreasonable under the circumstances involved, and which was not within the contemplation of the Agency and the Contractor.

3-3.3 Daily Reports by Contractor. *ADD the following after the 1st sentence:*
The Contractor shall notify the Agency Representative at the beginning of each day when extra work is in progress. No payment will be made for work not verified by the Agency Representative.

SECTION 4 - CONTROL OF MATERIALS

REVISE as follows:

4-1 MATERIALS AND WORKMANSHIP.

4-1.1 General. *ADD the following before the 1st sentence in the 1st paragraph:*
The Contractor shall furnish all materials required to complete the Work, except materials that are designated in the Special Provision to be furnished by the Agency.

ADD:

4-1.1.1 Contractor Equipment and Plants. Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project. Such equipment and plants shall be maintained in a good state of repair during the process of the Work. No obsolete or badly worn equipment and plants shall be used. Manufacturer's ratings shall not be exceeded.

Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to ensure a production rate of sufficient material to carry to completion within the time limit(s) specified in the Contract Documents, if any.

The Contractor, when ordered by the Engineer, shall remove unsuitable equipment from the work site and discontinue the operation of unsatisfactory plants and equipment.

ADD:

4-1.1.2 Adoption or Revision Date for Standards, Codes, and Tests. Whenever reference is made to a standard, code, specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code; specification or test in effect on the day of the Notice Inviting Bids is dated.

In accordance with the Public Contract Code § 3400, the Contractor shall submit data substantiating requests for substitution of “equal” items within thirty-five (35) days of Contract award or before ten percent of the Contract Working Days have expired, whichever is less. This time is included in the number of Working Days allowed for the completion of the Work. The Engineer’s decision regarding the acceptability of the substitution is final.

Materials, equipment, and supplies provided shall, without additional charge to Agency, fully conform with all applicable local, State and Federal safety laws, rules and regulations, and orders, and it shall be the Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefore on that particular material, equipment or supply as specified.

4-1.3 Inspection Requirements. *ADD the following before the 1st paragraph:*
Materials to be used in the Work will be subject to inspection and tests by the Engineer. The Contractor shall furnish without charge such samples as may be required. The Contractor shall furnish the Engineer a list of his sources of materials and the locations at which such materials will be available for inspection a minimum of twenty (20)

Calendar Days in advance of their intended use. The Engineer may inspect, sample or test materials at the source of supply or other locations, but such inspection, sampling or testing will not be undertaken until the Engineer is assured by the Contractor of the cooperation and assistance of both the Contractor and the supplier of the material. The Contractor shall assure that the Engineer has free access at all times to the material to be inspected, sampled or tested. It is understood that such inspections and tests, if made at any point other than the point of incorporation in the Work, in no way shall be considered as a guarantee of acceptance of such material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the Agency shall not relieve the Contractor or his suppliers of responsibility for quality control.

Manufacturers' warranties, guarantees, instruction sheets and parts lists, which are furnished with certain articles or materials incorporated in the Work, shall be delivered to the Engineer before acceptance of the Contract Work.

Reports and records of inspections made and tests performed when available at the site of the Work, may be examined by the Contractor.

4-1.3.1 General. *MODIFY to ADD the following:*
The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The Agency assumes no obligation to inspect materials at the source of supply.

4-1.4 Test of Materials. *MODIFY to ADD the following:*
The Contractor shall furnish the Agency Representative with a list of his sources of materials in sufficient time to permit proper inspection and testing of materials to be furnished for such listed sources in advance of their use. The Contractor shall furnish without charge such samples as may be required.

Inspection and tests will be made by the Agency Representative or his designated representative, but it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as guarantee of acceptance of such materials nor of continued acceptance of materials, presumed to be similar to that upon which inspection and tests have been made.

Tests of materials will be made in accordance with commonly recognized procedures of technical organizations and such special procedures as prescribed in the Contract Documents. Materials will be sampled and tested at such times during the process of the Work as deemed desirable by the Engineer, the Contractor shall cooperate in obtaining the samples.

ADD:

4-1.4.1 Testing Laboratory. The Contractor shall employ and pay for services of an independent testing laboratory, subject to approval by the Agency, to perform other testing and inspections services required by the Contract Documents.

Prior to start of Work, the Contractor shall submit his testing laboratory name, address and telephone number, and names of full-time registered engineer and responsible officer.

Employment of testing laboratories will in no way relieve Contractor of its obligation to perform the Work in accordance with Contract Documents.

Laboratory field technicians employed by the Agency shall have no authority to release, revoke, alter, or enlarge on requirements of Contract Documents, or to approve, accept or stop any portion of the Work.

The Contractor shall:

a) Cooperate with laboratory personnel, provide access to work, arrange access to manufacturer's operations.

b) Provide the laboratory with preliminary representative samples of materials to be tested, in required quantities.

c) Furnish copies of mill test reports.

d) Provide casual labor and facilities for access to work being tested; obtain and handle samples at the site; facilitate inspections and tests; provide facilities for the laboratory's exclusive use for storage and curing of test samples.

e) Coordinate requests for testing through the Agency Representative. Notify Agency Representative a minimum of three (3) Working Days in advance of operations to allow for assignment of personnel and scheduling of tests.

f) Pay for additional laboratory inspections, sampling and testing required for Contractor's convenience and when initial tests indicate that work does not comply with Contract Documents.

g) When required by the Contract Documents, submit manufacturer’s certificate, executed by responsible officer, certifying that the product(s) meet or exceed specified requirements. Provide certification in duplicate.

4-1.6 Trade Names or Equals. *MODIFY to ADD the following:*
The Contractor shall submit products list in accordance with the following:

a) Within the time specified in 4-1.1.2 of the Standard Specifications and these Special Provisions, transmit number of copies Contractor needs plus four (4) of a list of major products which are proposed for installation, including name of manufacturer. Tabulate products by specification section number, title and article number.

b) For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

c) The Engineer will reply in writing, stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

The following limitations shall apply to substitutions:

a) During the bidding period, Instructions to Bidders govern times for submitting requests for substitutions under requirements specified in this Subsection.

b) Requests for substitutions of products will be considered only within the time period specified in the Contract Documents. Subsequent requests will be considered only in the case of product unavailability or other conditions beyond control of Contractor. Material delivery schedules will not be considered justification for substitution.

c) Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request or when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.

d) Substitute products shall not be ordered or installed without written acceptance by the Engineer.

e) Only one request for substitution for each product line will be considered. When substitution is not accepted, provide specified product.

f) The Engineer will determine acceptability of substitutions.

Requests for substitutions shall conform to the following:

a) Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.

b) Identify product by specifications section and article numbers. Provide manufacturer's name and address, trade name or product, and model or catalog number. List fabricators and suppliers, as appropriate.

c) Give itemized comparison of proposed substitution with specified product, listing variations, and reference to specifications section and article numbers.

d) Give cost data comparing proposed substitution with specified product, and amount of net change to Contract sum.

e) List availability of maintenance services and replacement materials.

f) State effect of substitution on construction schedule, and changes required in other work or products.

Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product. The Contractor shall provide the same warranty for the substitution as for the specified product, shall coordinate installation of accepted substitute, making such changes as may be requested for Work to be complete in all respects, certifies that cost data presented is complete and includes all related costs under this Contract and waives claims for additional costs related to substitution which may later become apparent. The Contractor shall submit the number of copies the Contractor needs plus four of request for substitution. For accepted products, submit shop drawings, product data and samples, and tests conducted in accordance with 2-5.3.

ADD:

4-1.10 Agency-Furnished Materials. Materials which are listed as Agency-furnished materials in the Special Provisions will be available to the Contractor free of charge.

The Contractor shall submit a written request to the Engineer for the delivery of Agency-furnished material at least fifteen (15) Working Days in advance of the date of its intended use. The request shall state the quantity and the type of each material.

The locations at which Agency-furnished materials will be available to the Contractor free of charge will be designated in the Special Provisions. In those cases, the materials shall be hauled to the site of the Work by the Contractor at the Contractor's expense, including any necessary loading and unloading that may be involved. If the locations are not designated in the Special Provisions, the Agency-furnished materials will be furnished to the Contractor free of charge at the site of the Work. In either case, all costs of handling and placing Agency-furnished material shall be considered as included in the price paid for the contract item involving the Agency-furnished material.

The Contractor shall be responsible for Agency-furnished materials furnished to the Contractor, and shall pay all demurrage and storage charges. Agency-furnished materials, once furnished, delivered, or picked-up by the Contractor, that are lost or damaged from any cause whatsoever shall be replaced by the Contractor at the Contractor's expense. The Contractor shall be liable to the Agency for the cost of replacing Agency-furnished materials, and those costs may be deducted from any monies due or to become due the Contractor. All Agency-furnished material that is not used on the Work shall remain the property of the Agency, and the Contractor shall arrange with the Agency Representative for delivery back to the Agency at Contractor’s expense.

SECTION 5 - UTILITIES

REVISE as follows:

ADD:

5-0 GENERAL. For purposes of this Section 5, the terms referenced below are defined as follows:

An “unidentified” underground main or trunk line utility is one that is not indicated at all on the Plans, and a “misidentified” underground main or trunk line utility is one that is not indicated on the Plans with reasonable accuracy (a “misidentification”). An underground main or trunk line utility is indicated on the Plans with reasonable accuracy unless its actual location is substantially and materially different from that indicated on the Plans.

The term “rearrangement” of utilities means the relocation, alteration, reinstallation, and/or reconstruction of utilities (including removal of existing utilities incidental thereto) as necessary in order to accommodate the Work. Whenever in this Section 5 reference is made to any one or more of these rearrangement activities, such reference shall be deemed to include all other such activities as required in order to accommodate the Work.

5-1 LOCATION. *MODIFY to ADD the following:*
A list of utility companies that have facilities located within or near the construction area is included in the Special Provisions. The Engineer has endeavored to determine the existence of utility substructures at the site of the Work by reviewing the records of the owners of known utilities in that vicinity and consulting with those owners, and based on that information has indicated on the Plans those utility substructures (except for service connections) that may affect the Work.

The Contractor acknowledges that the utility information provided on the Plans and Special Provisions has not been verified and may not be accurate or complete. Except as expressly provided in this Section 5, the Contractor may not rely upon such utility information and the City assumes no responsibility for its accuracy or completeness. Changed conditions within the scope of 3-4 do not include utilities.

The Contractor shall determine the exact location (both horizontal and vertical), type and size of all existing utilities, including service connections, prior to commencing work which could result in damage to such utilities or could otherwise affect or be affected by such utilities or interfere with the service they provide. Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the Plans, the Contractor shall assume that every adjacent property parcel will be served by a service connection for each type of utility shown. The Contractor shall do such investigation, research, surveys and potholing as the Contractor deems necessary to make such determinations. The Contractor shall immediately notify the Engineer as to any utility discovered by it which is in a different position than indicated on the Plans or is not indicated at all on the Plans.

The Contractor's cost of locating any unidentified or misidentified underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3; provided, however, that the Contractor will not be entitled to such additional compensation if the existence and location (with reasonable accuracy) of such utility was (or should have been) known to the Contractor as of the date on which the Bids were due or could

otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of locating all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The information regarding underground and internal utilities and appurtenances which the Contractor is required to record in the Record Documents as specified in 7-16 shall include (but not be limited to) the accurate locations of underground utilities determined pursuant to this 5-1 and remaining in place, as well as utilities rearranged by either the Contractor or the utility owners.

At least two (2) Working Days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California [USA] at 1-800-422-4133) to obtain an inquiry identification number. The Contractor shall comply in all respects with California Government Code § 4216 *et seq.*

Caltrans is not required by Section 4216 *et seq.* to become a member of the regional notification center. The Contractor shall contact Caltrans for the location of its subsurface installations. In addition, the Contractor shall be aware that non-pressurized sewer lines, non-pressurized storm drains, and other non-pressurized drain lines are not required by § 4216 *et seq.* to be marked by the respective owners. The Contractor shall contact those utility owners as necessary to locate their subsurface installations.

The Contractor shall request the City of Irvine Traffic Operations Division at 949-724-7649 to locate any existing traffic signal conductors and interconnect within the construction area before performing Work that may affect or be affected by the existing facilities.

Except as expressly provided in this Section 5 with respect to unidentified or misidentified underground main or trunk line utilities, the failure of any utility company to accurately mark its facilities shall not be justification for a time extension or for additional compensation from the City.

The Contractor shall obtain photographs of all markings made by its forces as well as all USA markings. All such photographs shall show the subject markings in relation to one or more identifiable landmarks that will remain in place after completion of the Work and completion of any utility removal and/or rearrangement work in the vicinity.

The right is reserved to governmental agencies and to the owner of utilities to enter at any time upon any street, alley, right of way, or easement for the purpose of maintaining and making repairs to their property.

5-1.2 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for utility location by the Contractor shall be included in the various items of work and no additional compensation will be allowed therefor.

5-2 PROTECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities potentially impacted by the Work, the Contractor shall, unless otherwise specified on the Plans or in the Special Provisions, furnish and place the necessary protection and support.

Any additional cost incurred by the Contractor for protecting and supporting an unidentified underground main or trunk line utility or resulting from the misidentification of an underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3, unless such utility's existence and location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of protecting and supporting all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged in the course of the Work. The Contractor shall, if directed by the Engineer, restore, repair or replace any such disturbed or damaged utility.

For any unidentified or misidentified underground main or trunk line utility that is disturbed or damaged in the course of the Work, the cost of restoration, repair or replacement incurred by the Contractor, if not made necessary by the Contractor's failure to perform its obligations pursuant to the Contract Documents (including without limitation Section 5-1) or to otherwise exercise reasonable care, will be paid for as an addition to the Work in accordance with Section 3. Except where additional compensation is allowed pursuant to this paragraph, all utilities disturbed or damaged in the course of the Work shall be restored, repaired or replaced at the Contractor's cost and expense, either by the utility owner or by the Contractor.

To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any claims or liabilities (as defined therein) that may be asserted or claimed by any person or entity arising out of any disturbance or damage to utilities caused by the act or omission of the Contractor, whether or not such utilities are accurately marked either on the Plans or by the utility owner in the field, and whether or not there is concurrent active or passive negligence on the part of City and/or City Personnel, but excluding any such claims or liabilities arising from the sole active negligence or willful misconduct of City or City Personnel. All claims and liabilities for which the Contractor is responsible pursuant to this paragraph are sometimes referred to herein as "Utility Damage Claims."

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

a) Furnish and install a 2-inch (50 mm) cushion of expansion joint material or other similar resilient material; or

b) Provide a sleeve or other opening which will result in a 2-inch (50 mm) minimum-clear annular space between the concrete and the utility; or

c) Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for a structure which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other

cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer, shall arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system, and shall implement such procedures at the Contractor's expense.

5-4 RELOCATION. *DELETE in their entirety 2nd and 3rd paragraphs and SUBSTITUTE with the following:*
If utilities are found to interfere with the Work after award of the Contract, such utilities will be rearranged by the respective utility owners, or the Engineer may order the Contractor to perform such rearrangement, as an addition to the Work in accordance with Section 3. Alternatively, the Engineer may order changes in the Work to avoid such interference, in accordance with Section 3. All work by the Contractor on utilities shall be done to the reasonable satisfaction of the utility owner as well as complying with the requirements of the Contract Documents.

When the Plans or Special Provisions provide for the Contractor to rearrange a utility as part of the Work, all costs for such work shall be considered included in the Bid for the items of work necessitating such work. However, if an underground main or trunk line utility to be rearranged by the Contractor is misidentified in the Plans, any additional cost incurred by the Contractor for such work resulting from the misidentification shall be treated as an addition to the Work in accordance with Section 3, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. Except as provided in this paragraph, the Contractor shall not be entitled to any additional compensation on account of inaccuracies in the Plans with respect to rearrangements of utilities that are included in the Work.

Temporary or permanent rearrangement of utilities requested by the Contractor for its convenience shall be its responsibility and the Contractor shall make all arrangements necessary for such work and bear all related costs. The Contractor shall not be entitled to any additional compensation on account of any such utilities or work.

ADD the following at the beginning of the last paragraph:

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Special Provisions provide for the Contractor to rearrange any service connections, such work is considered included in the Bid for the items of work necessitating such work.

5-5 DELAYS. *DELETE in its entirety and SUBSTITUTE with the following:*
The construction schedule developed in accordance with 6-1 shall allow adequate time for the necessary protection, removal and rearrangement of utilities by either the utility owner or the Contractor, as applicable. For work to be performed by a utility owner, the construction schedule shall allow for the time period required by the utility owner for such work. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or rearrangement of utilities, and shall obtain the Engineer's approval of such changes.

The Contractor will not be entitled to any extensions of the Contract time or compensation for damages incurred due to delays attributable to utilities at the site of the Work except as

otherwise provided in 6-6.1 or as provided below. Delays described below will not be considered delays for which the City is responsible within the meaning of 6-6.3.

a) Subject to 6-6.2 and 6-6.4, the Contractor shall be entitled to an extension of the Contract time to the extent that any delay in the Work is directly attributable to an unidentified underground main or trunk line utility or the misidentification of an underground main or trunk line utility in the Plans, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. If the Contractor is entitled to such a time extension, the Contractor also shall be entitled to compensation for idle time of equipment on account of such delay, determined by the Engineer in the same manner as determinations are made for equipment used in the performance of Extra Work in accordance with Section 3. The Contractor shall not be entitled to any other compensation or damages on account of such delay.

b) The Contractor may be given an extension of time (but no additional compensation) for unforeseen delays attributable to failure of a utility owner to complete utility rearrangement work within the time period reasonably scheduled for such work in the construction schedule, or to timely complete utility rearrangement work which the Contract Documents indicate will be completed in advance of the Contractor's construction operations.

The Contractor shall not be entitled to any time extension or additional compensation for any delays or losses described in 5-5: (a) to the extent resulting from the Contractor’s actions or omissions or which could have been avoided by any reasonable means, such as the judicious handling of forces, equipment or plant, or (b) arising in connection with utilities being rearranged for the Contractor's convenience. The determination of what damages the Contractor could have avoided will be made by the Engineer.

The Contractor shall immediately notify the Engineer of any delays to the Contractor's operations described in 5-5. Delays described in 5-5 are not considered right of way delays within the scope of 2-8.

ADD:

5-7 CONTRACTOR RESPONSIBILITIES.
The Contractor shall:

a) Cooperate with utility personnel; provide access to work site.

b) Coordinate Work of the Contract with affected utilities. All USA markings shall be removed after completion of the work for which the markings were provided, and before Agency’s Acceptance and/or approval of the Work.

c) Asphalt concrete pavement not overlaid or slurry sealed as part of the project bid items which is damaged by trenching, potholing or where the contractor otherwise damages pavement shall be slurry sealed after the pavement section is repaired. “Perpendicular” street cuts shall be slurry sealed ten (10) feet each side of the cut and for “longitudinal” cuts shall be slurry sealed from pavement lane to pavement lane line for the entire damaged area or as directed by the Agency Representative. Type I slurry shall be used on non-arterial streets and

Type II slurry shall be used on arterial streets. Damaged traffic striping, legends and markers shall also be replaced if damaged. “Patchwork” application of slurry shall be avoided by joining closely grouped areas of slurry applications. Compensation for this requirement shall be considered as included in the prices paid for the related items of work and no additional compensation will be allowed therefor.

ADD:

5-8 PERMANENT UTILITIES. Contractor shall contact and make all arrangements with utility owners and coordinate all provisions for installation and connection of all permanent utilities that are necessary for the Work, such as, but not limited to, natural gas, electricity, water, sewer, and telephone. All costs for such installation and connection, as well as costs for operating permanent utilities prior to acceptance of the Work by the Agency, shall be considered as included in the prices in the Bid for the related items of work.

5-8.1 UTILITY CONTACT & CONSTRUCTION TABLE.

Utility Company	Contact/Phone	Estimated Construction Window / Duration in Working Days[1]	Work Description Includes But Is Not Limited To:
IRWD	Randy Sunberg 949-453-5551		
AboveNet	George Huss 443-403-2023		
AT&T-Distribution	Susan Blackburn 714-507-3526		
AT&T-Transmission	Joseph Forkert 714-963-7964		
AT&T-Transmission TCA	Maria Guzman 213-787-9996		
Clear Channel Outdoor	Kevin Kocic 213-305-0045		
Cox Communications	Thomas Eldred 949-546-2754		
City of Irvine	Permit Office 949-724-6313		
Kinder Morgan Energy Partners	Tim Szto 714-560-4908		
Level 3 Communications	John Trujillo 720-888-4465		
MCI (Verizon Wireless)	Dean Boyers 972-729-6322		
MPower Communications	Mark Denning		

[1] Note: Working days include multiple mobilizations.

	949-864-0296		
Metropolitan Water District	Orange County Substructures 213-217-6679		
Southern California Edison	Kim Gurule 714-796-9932		
Southern California Edison-Telecom	Ed Alvarez 323-724-0081		
Southern California Gas	Ryan Lopez 714-634-5067		
Southern California Gas-Transmission	Rosalyn Squires 818-701-4546		
Transportation Corridor Agencies	David Lowe 949-754-3488		
Wilshire Connection LLC	NOC 213-542-0100		
XO Communications	Lee Arnold 949-417-7762		

The construction durations listed represent total accumulated time for the installation of the utilities. It is anticipated that each utility will require several mobilizations to complete their work in conjunction with the Contractor's operations. The following additional information is provided to facilitate coordination between the Contractor and each respective utility company:

Utility specific coordination/protection/relocation information:
*Contractor shall notify IRWD representative prior to construction to coordinate existing and propose***d cross contamination testing requirements.**

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

REVISE as follows:

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall begin the Work on or before the date stipulated in the Notice to Proceed and shall diligently prosecute the Contract to completion within the time limit provided in the Contract.

The Contractor shall notify the Engineer of his intent to begin work at least two (2) Working Days prior to the start of any work.

The Contractor may, upon written approval from the Agency, begin work in advance of the date in the Notice to Proceed; however, no work shall be started in advance of the complete execution of the Contract and acceptance of the Contractor's construction schedule by the Agency. The Agency may, but shall not be required to, provide access to the site prior to the date specified in the Notice to Proceed.

Unless specified elsewhere in these Special Provisions, within ten (10) days after execution of the Contract, the Contractor shall deliver to the Agency Representative a construction progress schedule employing the critical path method, in a form satisfactory to the Engineer, showing the proposed dates of commencement and completion of each item of the Work and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.

The schedule format shall be as follows:

a) Prepare schedules as horizontal bar chart with separate bar for each portion of work or operation in accordance with approved schedule of values, identifying first workday of each week. Allow space for updating.

b) Sequence of Listings: Chronological order of the start of each item of work.

c) Sheet Size: Multiple of 8-1/2 x 11 inches.

d) Provide a two week look-ahead schedules (updated weekly).

The content of the schedules shall:

a) Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Include any special sequencing specified in the Contract Documents.

b) Show lane closures notifications and lane closure dates.

c) Provide sub-schedules to define major and significant portions of entire schedule.

d) Show accumulated percentage of completion of each item, and total percentage of Work completed as of first day of each month.

e) Provide separate schedule of dates for product procurement and delivery dates, shop drawing submittals and equipment installation. Show decision dates for selection of finishes, if applicable.

f) Show delivery dates for Agency-furnished products, if applicable.

g) Show the critical path.

Revisions to schedules shall:

a) Indicate progress of each activity to date of submittal, and projected completion date of each activity.

b) Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.

c) Provide written report to define any problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect.

d) Revise periodically as directed by the Agency Representative. Failure to comply with directive will be considered as grounds to delay progress payment.

e) Show the revised critical path.

Required submittals:

a) Submit initial schedules within ten (10) days after execution of the Contract. If requested, resubmit required revisions within seven (7) days of request.

b) Submit an update schedule on or before the first day of each month, beginning one month after the initial schedule as outlined in (a) above. If requested, resubmit required revisions within seven (7) days of request.

c) Submit four (4) copies of schedules to Agency Representative.

d) Submit under transmittal letter.

Contractor shall:

a) Distribute copies of current schedules to job site file subcontractors, suppliers and other concerned parties.

b) Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

Payment for conforming to these requirements shall be included in the various items of work and no additional compensation will be allowed therefor.

6-2 PROSECUTION OF THE WORK.

ADD:

6-2.1 Time of Completion and Forfeiture Due to Delay. The Contractor shall complete the Work called for under the Contract within the time set forth in the Special Provisions.

In accordance with Government Code § 53069.85, Contractor agrees to forfeit and pay to the Agency the amount per day set forth in the Contract for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Agency has endeavored to identify all areas of the site which may contain hazardous waste, as defined by Health and Safety Code § 25117, and unless otherwise noted said hazardous waste in these areas has been mitigated. However, the parties

expressly acknowledge the possibility of the existence of further hazardous waste not previously identified. If, during the course of his work, the Contractor encounters any such hazardous waste, he shall promptly notify the Agency through its designated representative. If the material is indeed “hazardous waste” pursuant to Health and Safety Code § 25117, the Agency has the option to have the mitigation work performed by the Contractor or by a separate contract from the work being performed. If the Contractor performs said mitigation work, the cost will be paid for as an addition to the work in accordance with Section 3. To the maximum extent permitted by law, the Agency shall not be liable for any damages beyond an appropriate time extension for delays occasioned by the existence of hazardous waste conditions contemplated herein.

No forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor (including but not restricted to acts of nature or of the public enemy, acts of the government, acts of the Agency, or acts of another contractor in the performance of a contract with the Agency, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather). Any such delays, except for acts of the Agency, shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be an extension of time obtained in accordance with this section.

The Contractor shall, within ten (10) Calendar Days from the beginning of any such delay, notify the Agency Representative in writing of the cause of delay, whereupon the Agency Representative will ascertain the facts and extent of the delay and extend the time for completing the Work if, in his judgment, the findings of the fact justify such an extension, and the Agency Representative’s findings of facts thereon shall be final and conclusive.

6-3 SUSPENSION OF THE WORK.

6-3.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

The Engineer shall have the authority to suspend the Work wholly or in part, for any time period as the Engineer deems necessary in the interest of Agency, for Agency’s convenience, or due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed as ordered or approved in writing by the Engineer.

Resumption of work shall be predicated on receipt of the following from the Contractor:

a) A revised schedule showing each task yet to be accomplished and the time line to accomplish each – until final completion.

b) The work force projections attached to each task listed per workweek.

c) The cost expenditures attached to each task summarized per each workweek.

d) Lien releases from each subcontractor, supplier, and vendor to which the Contractor has requested materials, equipment or any other service recognizing the payments received.

e) An Income and Expense Statement projecting how the Contractor will finance the reminder of the project.

Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3. For purposes of 6-6.3, delays resulting from suspensions ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract, shall not be delays for which the Agency is responsible.

In the event that a suspension of Work is ordered as provided above, the Contractor, at the Contractor's expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of that suspension as provided in 7-10, and as specified in these Special Provisions. In the event that the Contractor fails to perform the work above specified, the Agency will perform that work and, if the suspension is due to Contractor's failure to carry out orders given or to perform any provision of the Contract, the cost thereof will be deducted from monies due or to become due the Contractor.

If a suspension of work is ordered by the Engineer, in accordance with this subsection, the days on which the suspension order is in effect shall be considered working days if those days are working days within the meaning of the definition set forth in 6-7.2.

The suspension of Work shall not relieve the Contractor of the responsibilities as set forth in the Contract Documents.

6-4 TERMINATION OF THE CONTRACT FOR DEFAULT. *ADD the following:*
In the event this Contract is terminated for grounds which are later determined not to justify a termination for breach, such termination shall be deemed to constitute a Termination of the Contract for Convenience pursuant to 6-5.

6-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency reserves the right to terminate the Contract at any time upon a determination by the Engineer that termination of the Contract is in the best interest of the Agency.

If the Agency elects to terminate the Contract, the termination of the Contract and the total compensation payable to the Contractor shall be governed by the following:

a) The Engineer will issue the Contractor a signed written notice, specifying that the Contract is to be terminated. Upon termination of the Contract, the Contractor will be relieved of further responsibility for damage to the Work (excluding materials) as specified in 4-1.2 of the Standard Specifications, 7-16 of these Special Provisions and, except as otherwise directed in writing by the Engineer, the Contractor shall:

    1) Stop all work under the Contract except that specifically directed to be completed prior to Acceptance.

    2) Perform work the Engineer deems necessary to secure the project for termination.

    3) Remove equipment and plant from the site of the Work.

4) Take action that is necessary to protect materials from damage.

5) Notify all subcontractors and suppliers that the Contract is being terminated and that their contracts or orders are not to be further performed unless otherwise authorized in writing by the Engineer.

6) Provide the Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the Work and not yet used in the Work, including its storage location, and such other information as the Engineer may request.

7) Dispose of materials not yet used in the Work as directed by the Engineer. It shall be the Contractor's responsibility to provide the Agency with good title to all materials purchased by the Agency hereunder, including materials for which partial payment has been made as provided in 9-3.2 and with bills of sale or other documents of title for those materials.

8) Subject to the prior written approval of the Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the Engineer, the Contractor shall assign to the Agency all the right, title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.

9) Furnish the Engineer with the documentation required to be furnished by the Contractor under the provisions of the Contract including, on projects as to which Federal funds are involved, all documentation required under the Federal requirements included in the Contract.

10) Take other actions directed by the Engineer.

b) Acceptance of the contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials. The Contractor shall continue to be responsible for damage to materials after issuance of the Notice of Termination, except as follows:

1) The Contractor's responsibility for damage to materials for which partial payment has been made as provided in 9-3.2 and for materials furnished by the Agency for use in the Work and unused shall terminate when the Engineer certifies that those materials have been stored in the manner and at the locations the Engineer has directed.

2) The Contractor's responsibility for damage to materials purchased by the Agency subsequent to the issuance of the notice that the Contract is to be terminated shall terminate when title and delivery of those materials has been taken by the Agency.

When the Engineer determines that the Contractor has completed the Work under the Contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, the Engineer will formally accept the Contract, and immediately upon and after the acceptance by the Engineer, the Contractor will not be required to perform any further work thereon.

c) Termination of the Contract shall not relieve the surety of its obligation for any just claims arising out of the work performed.

d) Where Agency terminates the Contract for Agency's convenience and not due to the fault of Contractor, the total compensation to be paid to the Contractor shall be determined by the Engineer based on the following:

1) The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. In determining the reasonable cost, deductions will be made for the cost of materials to be retained by the Contractor, amounts realized by the sale of materials, and for other appropriate credits against the cost of the work. When, in the opinion of the Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing that work in compliance with the requirements of the Plans and Specifications and the excessive actual cost shall be disallowed.

2) A reasonable allowance for profit on the cost of the work performed as determined under part (1) above, provided the Contractor establishes to the satisfaction of the Engineer that it is reasonably probable that the Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed 4 percent of the cost.

3) The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the Agency or otherwise disposed of as directed by the Engineer.

4) A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the Contract.

All records of the Contractor and the Contractor's subcontractors, necessary to determine compensation in conformance with the provisions in this Section 6-5, shall be open to inspection or audit by representatives of the Agency at all times after issuance of the notice that the Contract is to be terminated and for a period of 3 years, thereafter, and those records shall be retained for that period.

After acceptance of the Work by the Agency, the Engineer may make payments on the basis of interim estimates pending issuance of the final estimate in conformance with the provisions in 9-3.2 and 9-4, when, in the Engineer's opinion, the amount thus paid, together with all amounts previously paid or allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the final estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the Contract.

THE PROVISIONS IN THIS SECTION 6-5 SHALL BE PHYSICALLY INCLUDED IN ALL SUBCONTRACTS.

6-6.2 Extension of Time. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may extend the time fixed for completion of the Work under the Contract from time to time. All applications for extensions of time shall be in writing and shall be filed with the Agency before the expiration of the original time fixed in the Contract or as previously extended.

An extension of time may be granted by the Agency after the expiration of the time originally fixed in the Contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration. Any extension of time shall not release the sureties upon any bond required under the Contract nor effect forfeitures due to delay.

No extension of time will be granted for delays that are not on the critical path.

6-8.1 Completion. *DELETE in its entirety and SUBSTITUTE with the following:*
When the Contractor considers the Work, or a designated portion of Work, if specified in the Contract Documents, is complete, the Contractor shall submit a written request to the Engineer for inspection. By submittal of such request, Contractor certifies that:

a) Contract Documents have been reviewed by the Contractor.

b) Work has been completed in accordance with Contract Documents and is ready for inspection.

c) Equipment and systems have been tested, adjusted/balanced and are fully operational.

The Contractor shall submit the request a minimum of five (5) Working Days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time during the Contract period to complete inspections and make any corrections. Each day beyond the time prescribed to complete the Contract will be subject to assessment of liquidated damages in accordance with 6-9.

Should Agency Representative's inspection find Work incomplete, Agency Representative will notify the Contractor in writing, listing observed deficiencies. The Contractor shall remedy listed deficiencies immediately and send a request for final inspection. Failure of the Contractor to remedy deficiencies may, at the Agency's option, result in reinspection(s) of the work to identify additional deficiencies, if any. Agency's costs associated with reinspection(s) are subject to provisions of 6-8.2.

When the Agency confirms Work is complete and, closeout submittals, as referred to in 6-8.3 have been provided, Agency Representative will notify Contractor of date of completion on the Weekly Statement of Working Days.

ADD:

6-8.4 Reinspections. Should status of completion of Work require reinspection(s) by Agency due to failure of the Contractor to make corrections on initial inspection, Agency may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

Inspections initiated at the request of the Agency will not be subject to provisions of this Subsection.

ADD:

6-8.5 Closeout Submittals.
Contractor shall submit:

a) Project Record Documents clearly marked with all changes to Plans within thirty (30) Calendar Days of Final Acceptance

b) Operation and Maintenance Data

c) Warranties and Bonds

d) Spare Parts and Maintenance Materials, as specified

e) Evidence of Payment and Release of Stop Payment Notices

f) Other data and materials as may be required in the Contract Documents

6-9 LIQUIDATED DAMAGES. *DELETE in its entirety and SUBSTITUTE with the following:*
Liquidated damages shall be as specified in the Contract.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

REVISE as follows:

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General. *MODIFY to ADD the following:*
The Contractor shall render its machinery and equipment inoperable at all times except during actual construction. The Contractor shall be responsible for construction means, controls, techniques, sequences, procedures and construction safety.

ADD:

7-1.1.1 Equipment. Contractor shall stencil or stamp at a clearly visible location on each piece of equipment, except hand tools, an identifying number and:

a) On compacting equipment, its make, model number, and empty gross weight that is either the manufacturer's rated weight or the scale weight.

b) On meters and on the load-receiving element and indicators of each scale, the make, model, serial number, and manufacturer's rated capacity.

The Contractor shall submit a list describing each piece of equipment and its identifying number before commencement of the Work.

Upon request, the Contractor shall submit manufacturer's information that designates portable vehicle scale capacities.

The Contractor's measuring devices shall be tested and approved under California Test 109 in the Agency's presence or by any of the following:

a) County Sealer of Weights and Measures

b) Certified Scale Service Agency

c) Division of Measurement Standards Official

7-1.2 Temporary Utility Services. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall, at its own expense, make all arrangements to furnish, install and maintain temporary water, electricity, telephone, and sanitary facilities for construction needs throughout construction period. Materials may be new or used, but must be adequate for the purposes intended, and must not violate requirements of applicable codes, specifications or standards.

The Contractor shall maintain systems to provide continuous services, modify, and extend services, as work progress requires. The Contractor shall completely remove temporary materials and equipment when construction needs can be met by use of permanent utility facilities.

The Contractor shall clean and repair damage caused by installation or use of temporary facilities, restore existing facilities used for temporary services to original or better condition, and restore permanent facilities used for temporary services to original condition.

For water, the Contractor shall:

a) Provide adequate supply of water suitable for construction usage and needs.

Water Source: Irvine Ranch Water District (IRWD)

a) Obtain meter, inspections and approvals prior to use of existing system.
b) Comply with IRWD requirements.

Conservation:

a) Minimize water use whenever possible.
b) Maintain watering equipment in good working order.
c) Repair leaks promptly.

When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

For electricity, the Contractor shall:

a) Provide portable power plants and/or connection to existing system for construction needs.
b) Source of existing power: Southern California Edison Company (SCE). Prior to connecting to existing system:
    1) Obtain permit from City of Irvine, Community Development Department for installation of temporary power pole and/or system.
    2) Arrange for required inspections and coordinate temporary meter installation with City and SCE.

For sanitary facilities, the Contractor shall:

a) Furnish and maintain portable toilet units in a clean, operable and sanitary condition for use by construction personnel.
b) Place units in conformance with applicable laws, codes and regulations.

Pay all fees and charges for applications, non-City permits and inspections, installations, temporary meters, utility usage, service charges, maintenance, removals and restoration.

Contractor shall use standard products of service companies. At Contractor's option with prior approval by the Agency, patented specialty devices may be used, when in compliance with applicable codes and service company requirements.

7-2.3 Payroll Records. *MODIFY to ADD the following:*
The Contractor and all its subcontractors shall submit to the City and the Labor Commissioner (Division of Labor Standards Enforcement) certified payroll records every Friday until Notice of Completion is filed and recorded.

7-3 INSURANCE.

7-3.1 General. *MODIFY to ADD the following:*
Without limiting Contractor's indemnification obligations, the Contractor shall not commence work until he procures and maintains, at his sole cost and for the duration of

this Contract, insurance coverage as provided below, against all claims for injuries against persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees, and/or subcontractors. In the event that Contractor subcontracts any portion of the Work in compliance with 2-3 of the Standard Specifications and Special Provisions, the Contract between the Contractor and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Contractor is required to maintain pursuant to 7-3.

Insurance policies shall be deemed not be in compliance if they include any limiting provision or endorsement that has not been submitted for approval in accordance with 7-3.

The Contractor's insurance shall be "occurrence" rather than "claims made" insurance, except for Professional Liability insurance, which may be for claims made and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

The insurance coverage required for General Liability, Automobile Liability and Contractor's Pollution Liability shall contain the following provisions or be endorsed to provide the following:

The Contractor shall name as additional insured the City of Irvine, IRWD, and Irvine Company**,** their elected officials, officers, employees, volunteers, boards and representatives shall be additional insured with regard to liability and defense of suits or claims arising out of the performance of the Contract.

Additional Insured Endorsements shall not:

a) Be limited to "Ongoing Operations"
b) Exclude "Contractual Liability"
c) Restrict coverage to the "Sole" liability of contractor
d) Contain any other exclusion contrary to the Contract

This insurance shall be primary and any other insurance, deductible, or self-insurance available to the insured added by endorsement shall be in excess of and shall not contribute with this insurance.

The Contractor shall immediately report all claims to its insurance carrier and acknowledge receipt within thirty (30) Calendar Days.

No officer, employee, or agent of the Agency, Agency Representative, the Engineer, or their consultants shall be personally responsible for any liability arising under or by virtue of the Contract.

To the maximum extent permitted by law, Contractor shall hold harmless, indemnify, and defend the City of Irvine, IRWD, and Irvine Company their representatives and each of their officers, employees, and agents from and against any and all actions, suits, claims, demands, judgments, attorney's fees, costs, damages to persons or property, losses, penalties, obligations, expenses or liabilities (herein "claims" or "liabilities") that may be asserted or claimed by any person or entity arising out of the willful or negligent acts, errors or omissions of Contractor, its employees, agents, representatives or subcontractors in the performance of any tasks or services for or on behalf of Agency, whether or not there is concurrent active or passive negligence on the part of Agency

and/or Agency Personnel, but excluding such claims or liabilities arising from the active negligence or willful misconduct of Agency or Agency Personnel. In connection therewith:

a) Contractor shall defend any action or actions filed in connection with any such claims or liabilities, and shall pay all costs and expenses, including attorney's fees incurred in connection therewith.

b) Contractor shall promptly pay any judgment rendered against Agency or any Agency Personnel for any such claims or liabilities.

c) In the event Agency and/or any Agency Personnel is made a party to any action or proceeding filed or prosecuted for any such damages or other claims arising out of or in connection with the negligent performance or a failure to perform the work or activities of Contractor, Contractor shall pay to Agency any and all costs and expenses incurred by Agency or Agency Personnel in such action or proceeding, together with reasonable attorney's fees and expert witness fees. So much of the money due to the Contractor under and by virtue of the Contract as shall be considered necessary by the Agency may be retained by the Agency until disposition has been made of such actions or claims for damages as aforesaid.

Any deductibles or self-insured retentions must be declared to and approved by Agency prior to the execution of this Contract by Agency. Prior to commencing work, the Contractor will provide the Agency, in accordance with 7-3, written confirmation of the deductible for each insurance coverage required by this contract or in the case of no deductible.

DELETE 4th paragraph and SUBSTITUTE with the following:

All policies shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided.

In lieu of this endorsement, the Contractor shall either:

a) Submit a letter, signed by the insurance agent or broker, certifying that he/she shall notify the City should the coverage be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided; or

b) Submit evidence that the insurance premium has been paid in full for the life of the policy.

The City project title or description MUST be included in the “Description of Operations” box on the certificate.

The City’s insurance certificate tracking services provider, Exigis, LLC, will send Contractor an email message providing instructions for submitting insurance certificates and endorsements.

Certificate Holder:
City of Irvine, California
c/o: Exigis LLC
PO Box 4668 ECM #35050
New York, NY 10168-4668

The City's insurance certificate tracking services provider, EXIGIS, LLC, will send Contractor an email message providing instructions for submitting insurance certificates and endorsements.

7-3.2 General Liability Insurance. *DELETE the 2nd paragraph and SUBSTITUTE with the following:*
General Liability (including premises, operations and mobile equipment, products and completed operations, broad form property damage including completed operations, explosion, collapse and underground hazards, contractual liability, personal injury, independent contractors' liability): with a minimum limit of Two Million Dollars ($2,000,000) for each occurrence (combined single limit for bodily injury and property damage). Minimum limit of Two Million Dollars ($2,000,000) aggregate for products–completed operations and with a minimum limit of Four Million Dollars ($4,000,000) general aggregate. This general aggregate limit shall apply separately to the Contractor's work under this Contract.

Products-Completed Operations: Contractor shall procure and submit evidence of insurance in accordance with 7-3 of the Standard Specifications and these Special Provisions for a period of at least three (3) years from the time that all Work under this Contract is completed.

7-3.3 Workers' Compensation Insurance. *MODIFY to ADD the following:*
Workers' Compensation and Employer's Liability: Workers' Compensation Insurance in an amount required by the laws of the State of California (Statutory Limits). Employer's Liability Insurance with a minimum limit of One Million Dollars ($1,000,000) per occurrence.

In the event Contractor has no employees requiring Contractor to provide Workers' Compensation Insurance, Contractor shall so certify to Agency in writing prior to Agency's execution of this Contract. Agency and Agency Personnel shall not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this section or with the provisions of law relating to Workers' Compensation.

If Contractor is providing on-site staffing services, then the Workers' Compensation insurance shall include an Alternative Employers Endorsement.

7-3.8 Self-Insurance. Self-insurance will be subject to the Agency's review and prior approval. If the Contractor uses any form of self-insurance, it shall submit:

a) A notice of election to self-insure.
b) The coverages for which self-insurance applies.
c) The amount of self-insurance.

d) Declaration under the penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles (GAAP) guidelines and the Contractor has sufficient funds or other resources to cover the self-insurance amounts.

e) Copy of its commercial general liability policy and its excess policy, including the declarations page, all amendments, riders, endorsements and other modifications in effect at the time of contract execution, for those amounts not covered by self-insurance.

Self-insurance programs and self-insured retentions in insurance policies are subject to separate annual review and approval by the Agency of evidence of the Contractor's financial capacity to respond. Additionally, self-insurance programs or retentions must provide the Agency with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance.

7-5 PERMITS. *DELETE in its entirety and SUBSTITUTE with the following:*

7-5 PERMITS AND LICENSES. Except as otherwise specified in the Special Provisions, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the Work. These permits and licenses shall be obtained in sufficient time to prevent delays to the Work. The Contractor shall maintain a copy of all permits on the site. The Contractor shall furnish the Agency with copies of permits and licenses within one (1) Working Day of obtaining them. The Contractor shall comply with all rules and regulations included in permits. Should the Contractor fail to conform to said rules and regulations, the Agency reserves the right to perform the work necessary to conform to the rules and regulations and the cost of such work will be deducted from any monies due or to become due to the Contractor.

The Contractor and all subcontractors shall obtain within five (5) Calendar Days of executing the Contract, a current City of Irvine Business License and maintain such license(s) throughout the term of the Contract.

In the event that the Agency has obtained permits, licenses or other authorizations applicable to the Work, the Contractor shall obtain a rider, pay all fees and comply with the provisions of said permits, licenses and other authorizations.

7-6 THE CONTRACTOR'S REPRESENTATIVE. *DELETE the 3rd sentence in the 1st paragraph and SUBSTITUTE with the following:*
Said authorized representative shall be present at the site of the Work at all times while Work is actually in progress on the Contract. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Agency Representative shall be made for any emergency work, which may be required.

ADD the following after the last sentence of the 1st paragraph:

Whenever the Contractor or his authorized representative is not present on any particular part of the Work where it may be desired to give direction, orders will be given by the Agency Representative, which shall be received and obeyed by the superintendent or supervisor who may have charge of the particular work in reference to which the orders are given.

The Agency reserves the right to approve the Contractor's Superintendent. Once approved, the Superintendent shall remain on the project for the duration of the project so long as he is in the employment of the Contractor.

7-7 COOPERATION AND COLLATERAL WORK. *DELETE in its entirety 4th paragraph and SUBSTITUTE with the following:*
Nothing in the Contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Agency in the construction of the project, to the end that the Contractor may perform this Contract in the light of such other constraints, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on or adjacent to the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Engineer will decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the Contractors may proceed simultaneously. On all questions concerning conflicting interest of Contractors performing related work, the decision of the Engineer shall be binding upon Contractors concerned. The Agency, the Engineer, the Agency Representative, and each of their officers, employees, and agents shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award of performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Engineer respecting the order of precedence in the performance of the contracts.

If, through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the Work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Agency, the Engineer, the Agency Representative, or their consultants on account of any damage alleged to have been so sustained, the Agency will notify the Contractor. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of the assertion of any such claims or liabilities against the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any such claim.

ADD:

7-7.1 Coordination. It is anticipated that work by other contractors, utility companies and City of Irvine forces will be underway adjacent to or within the limits of this project during progress of the Work on this contract.

It is anticipated that construction projects including, but not limited to, the following may be in progress concurrently with this project:

a) Irrigation Controller Replacement, CIP 381601

b) Irvine Ranch Water District’s offside work to connect to recycled water main lines for water meter conversion locations per this Streetscape Rehabilitation project.

The Contractor shall coordinate his operations with the operations of other contractors during stage construction, traffic shifts, opening of new lanes, closing of lanes, roads or

ramps, detours, traffic signal facilities, shared irrigation facilities for landscaped areas and during any other operation that may affect or have influence on adjacent projects including, but not limited to, those identified in this subsection.

7-8 WORK SITE MAINTENANCE. *MODIFY to ADD the Following:*
Section 7-8 includes specifications for performing work site maintenance, including spill prevention and control, material management, waste management, water pollution control and non-stormwater management.

Projects are required to comply with the City of Irvine Resolution No. 07-18, which establishes requirements for recycling and diversion of construction and demolition waste.

The Contractor shall implement effective handling, storage, usage, and disposal practices to control material pollution and manage waste and nonstormwater at the job site before they come in contact with storm drain systems and receiving waters.

Linear sediment barriers must comply with 7-8.6.2 of the Standard Specifications and the Contract Special Provisions.

ADD:

7-8.1.1 Construction Cleaning. The Contractor shall:

a) Initiate and maintain a daily program to prevent accumulation of debris on-site and along access roads and haul routes. Maintain areas under Contractor's control free of waste materials, debris, weeds 6” high, and rubbish. Maintain site in a clean and orderly condition.

b) Provide suitable covered containers for deposit of debris and rubbish. Dispose of accumulation of extraneous materials, prohibit overloading of trucks to prevent spillages on access and haul routes and provide daily inspection of haul routes to enforce requirements.

c) The Contractor shall supply self-loading motorized street sweepers equipped with a functional water spray system as part of his daily program.

d) Schedule at a minimum, weekly collection and disposal of debris. Provide additional collections and disposals of debris whenever the weekly schedule is inadequate to prevent accumulation.

The Contractor shall remove debris from closed or remote spaces prior to closing the space, control cleaning operations to minimize dust and other particulates and immediately remove clay and earth which adhere to the paved surface of the roadway. Remove by hand scraping, washing, sweeping, and/or other method(s) which will leave a clean non-skid surface without impairing, injuring or loosening the surface.

The Contractor shall remove waste materials, debris, vegetation, other rubbish, and non-recyclable materials as required by the Contract Documents, and dispose of off-site in an approved disposal site or recycling center.

Unless otherwise specified in the Special Provisions, all concrete, asphalt, aggregate or sand base material, cement block, trees, shrubs, bushes, and all other recyclable material generated during cleaning, demolition, clearing and grubbing or other phases of the work

is to be disposed of at appropriate recycling centers. The Contractor shall be responsible for removing reinforcing steel, wood, or other deleterious materials as required by the recycling center for acceptance of recycled materials. The Contractor shall supply proof of disposal at a recycling center. The proof of disposal shall include verification of tonnage by certified weigh masters tickets. If weigh masters tickets are not feasible, the Contractor and Agency Representative shall estimate the tonnage prior to disposal at the recycling centers.

Known recycling centers:

Ewles Materials
16081 Construction Circle West
Irvine

The Contractor is required to control dust throughout the life of the Contract. The control may be required by job conditions or Agency Representative. In any case, the Contractor shall use water or other means to control the dust. No chemical agents may be used without written authorization from the Agency. The Contractor shall be solely responsible for safety problems, accidents or any other complications or claims arising from inadequate dust control.

No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the Work, or by public traffic, either inside or outside the right of way. Full compensation for such dust control will be considered as included in the price paid for the various items of work involved.

No separate payment will be made for any work performed or material used in cleaning the project. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.1.2 Final Cleaning. The Contractor shall execute cleaning prior to inspection for completion of the Work. The Contractor shall use materials which will not create hazards to health or property, and which will not damage surfaces, remove debris from and otherwise clean exposed-to-view surfaces, remove temporary protection and labels not required to remain, clean finishes free of foreign substances, remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean, clean other exterior surfaces and where applicable:

a) Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.

b) Vacuum clean carpeted and similar soft surfaces.

c) Clean resilient and hard surface floors.

d) Clean surfaces of equipment; remove excess lubrication.

e) Clean plumbing fixtures to a sanitary condition.

f) Clean permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts,

blowers, and coils when units have been operated without filters during construction.

g) Clean light fixtures and lamps.

h) Remove waste, foreign matter, and debris from roofs, gutters, areaways, and drainage systems.

ADD:

7-8.4.3 Material Management.

7-8.4.3.1 General. The Contractor shall minimize or eliminate discharge of material into the air, storm drain systems, and receiving waters while taking delivery of, using, or storing the following materials:

a) Hazardous chemicals, including acids, lime, glues, adhesives, paints, solvents, and curing compounds

b) Soil stabilizers and binders

c) Fertilizers

d) Detergents

e) Plaster

f) Petroleum materials, including fuel, oil, and grease

g) Asphalt and concrete components

h) Pesticides and herbicides

The Contractor's employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

The Contractor shall use less hazardous materials if practicable.

The following activities must be performed at least 100 feet from concentrated flows of stormwater, drainage courses, and inlets if within the floodplain and at least 50 feet if outside the floodplain, unless otherwise authorized:

a) Stockpiling materials

b) Storing pile-driving equipment and liquid waste containers

c) Washing vehicles and equipment in outside areas

d) Fueling and maintaining vehicles and equipment

7-8.4.3.2 Material Storage. If materials are stored by the Contractor, he shall:

a) Store liquids, petroleum materials, and substances listed in 40 CFR 110, 117, and 302 and place them in secondary containment facilities as specified by USDOT for storage of hazardous materials.

b) Ensure that secondary containment facilities are impervious to the materials stored there for a minimum contact time of 72 hours.

c) Cover secondary containment facilities during nonworking days and whenever precipitation is forecasted. Secondary containment facilities must be adequately ventilated.

d) Keep secondary containment facilities free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place it into drums within 24 hours. Handle the liquid as hazardous waste in accordance with subsection 7-8 of the Standard Specifications and these Special Provisions.

e) Not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.

f) Store materials in their original containers with the original material labels maintained in legible condition. Immediately replace damaged or illegible labels.

g) Ensure that secondary containment facilities have the capacity to contain precipitation from a 24-hour-long, 25-year storm, plus 10 percent of the aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.

h) Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during nonworking days and whenever precipitation is forecasted.

i) Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized, and equipped with cleanup supplies appropriate for the materials being stored.

j) Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation and at least weekly during other times.

7-8.4.3.3 Stockpile Management. The Contractor shall minimize stockpiling of materials at the job site.

The Contractor shall implement water pollution control practices within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If stockpiles are being used, do not allow soil, sediment, or other debris to enter storm drains, open drainages, and watercourses.

Active and inactive soil stockpiles must be:

a) Covered with soil stabilization material or a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of asphalt concrete and PCC rubble, HMA, aggregate base, or aggregate sub base must be:

a) Covered with a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of pressure-treated wood must be:

a) Placed on pallets

b) Covered with impermeable material

Stockpiles of cold mix asphalt concrete must be:

a) Placed on an impervious surface

b) Covered with an impermeable material

c) Protected from stormwater run-on and runoff

The Contractor shall control wind erosion year round.

The Contractor shall repair or replace linear sediment barriers and covers as needed to keep them functioning properly. Whenever sediment accumulates to 1/3 of the linear sediment barrier height, remove the accumulated sediment.

7-8.5.3 Spill Prevention and Emergency Response Plan.

ADD:

7-8.5.3.1 Spill Prevention and Control. The Contractor shall keep material or waste storage areas clean, well-organized, and equipped with enough cleanup supplies for the material being stored.

The Contractor shall implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. Whenever the Contractor spills or leaks chemicals or hazardous substances at the job site, he is responsible for all associated cleanup costs and related liability.

The Contractor shall report minor, semi significant, and significant or hazardous spills to the WPC manager and the WPC manager must notify the Engineer immediately.

As soon as it is safe, the Contractor shall contain and clean up spills of petroleum materials and sanitary and septic waste substances listed under 40 CFR, parts 110, 117, and 302.

ADD:

7-8.5.3.2 Minor Spills. Minor spills consist of quantities of oil, gasoline, paint, or other materials that are small enough to be controlled by a first responder upon discovery of the spill.

The Contractor shall clean up a minor spill using the following procedures:

a) Contain the spread of the spill

b) Recover the spilled material using absorption

c) Clean the contaminated area

d) Dispose of the contaminated material and absorbents promptly and properly

ADD:

7-8.5.3.3 Semi Significant Spills. Semi significant spills consist of spills that can be controlled by a first responder with help from other personnel.

The Contractor shall clean up a semi significant spill immediately using the following procedures:

a) Contain the spread of the spill.

b) On paved or impervious surfaces, encircle and recover the spilled material with absorbent materials. Do not allow the spill to spread widely.

c) If the spill occurs on soil, contain the spill by constructing an earthen dike and dig up the contaminated soil for disposal.

d) If the spill occurs during precipitation, cover the spill with 10-mil plastic sheeting or other material to prevent contamination of runoff.

e) Dispose of the contaminated material promptly and properly.

ADD:

7-8.5.3.4 Significant or Hazardous Spills. Significant or hazardous spills consist of spills that cannot be controlled by job site personnel.

The Contractor shall immediately notify qualified personnel of a significant or hazardous spill and take the following steps:

a) Do not attempt to clean up the spill until qualified personnel have arrived.

b) Notify the Engineer and follow up with a report.

c) Obtain the immediate services of a spill contractor or hazardous material team.

d) Notify local emergency response teams by dialing 911 and county officials by using the emergency phone numbers retained at the job site.

e) Notify the California Emergency Management Agency State Warning Center at 916-845-8911.

f) Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under 40 CFR 110, 119, and 302.

g) Notify other agencies as appropriate, including:

    1) Fire Department
    2) Public Works Department
    3) Coast Guard
    4) Highway Patrol
    5) City Police or County Sheriff's Department
    6) Department of Toxic Substances
    7) California Division of Oil and Gas
    8) Cal/OSHA
    9) Regional Water Resources Control Board

The Contractor shall prevent a spill from entering stormwater runoff before and during cleanup activities and shall not bury or wash the spill with water.

ADD:

7-8.5.4 Waste Management.

7-8.5.4.1 Paint Waste. The Contractor shall clean water-based and oil-based paint from brushes or equipment within a contained area in a way that does not contaminate soil, receiving waters, or storm drain systems. Handle and dispose of the following as

hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste under: dry latex paint, paint cans, used brushes, rags, absorbent materials, and drop cloths.

7-8.5.4.2 Concrete Waste. The Contractor shall use practices to prevent the discharge of asphalt concrete, PCC, and HMA waste into storm drain systems and receiving waters.

The Contractor shall collect and dispose of asphalt concrete, PCC, and HMA waste at locations where:

a) Concrete material, including grout, is used.

b) Concrete dust and debris result from demolition.

c) Saw cutting, coring, grinding, grooving, or hydro-concrete demolition creates a residue or slurry.

d) Concrete trucks or other concrete-coated equipment is cleaned at the job site.

7-8.5.4.3 Sanitary and Septic Waste. The Contractor shall not bury or discharge wastewater from a sanitary or septic system anywhere at the site of Work. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. The Contractor shall place a portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines.

The Contractor shall comply with local health agency provisions if using an on-site disposal system.

7-8.5.4.4 Liquid Waste. The Contractor shall use practices that will prevent job-site liquid waste from entering storm drain systems and receiving waters. Liquid wastes include the following:

a) Drilling slurries or fluids

b) Grease-free and oil-free wastewater and rinse water

c) Dredging, including liquid waste from cleaning drainage systems

d) Liquid waste running off a surface, including wash or rinse water

e) Other nonstormwater liquids not covered by separate permits

The Contractor shall hold liquid waste in structurally sound, leak-proof containers, such as roll-off bins or portable tanks.

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills, and leaks.

The Contractor shall store containers at least 50 feet from moving vehicles and equipment.

The Contractor shall remove and dispose of deposited solids from sediment traps in accordance with 7-8 of the Standard Specifications and these Special Provisions. Liquid waste may require testing to determine hazardous material content before disposal.

The Contractor shall dispose of drilling fluids and residue.

If an authorized location is available within the job site, fluids and residue exempt under 23 CA Code of Regs § 2511(g) may be dried by evaporation in a leak-proof container. The Contractor shall dispose of the remaining solid waste in accordance with 7-8 of the Standard Specifications and these Special Provisions.

ADD:

7-8.5.5 Nonstormwater Management.

7-8.5.5.1 Water Control and Conservation. The Contractor shall manage water used for work activities in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Obtain authorization before washing anything at the job site with water that could discharge into a storm drain system or receiving waters. Report discharges immediately.

The Contractor shall implement water conservation practices if water is used at the job site. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off the water source to broken lines, sprinklers, or valves and repair breaks within 24 hours. Reuse water from waterline flushing for landscape irrigation if practicable. Sweep and vacuum paved areas. Do not wash paved areas with water.

The Contractor shall direct runoff water, including water from water line repair, from the job site to areas where it can infiltrate into the ground. Do not allow runoff water to enter storm drain systems and receiving waters. Do not allow spilled water to escape filling areas for water trucks. Direct water from off-site sources around the job site if practicable. Minimize the contact of off-site water with job site water.

7-8.5.5.2 Illicit Connection and Illegal Discharge Detection and Reporting. Before starting work, the Contractor shall inspect the job site and the job site's perimeter for evidence of illicit connections, illegal discharges, and dumping. After starting work, inspect the job site and perimeter on a daily schedule for illicit connections and illegal dumping and discharges.

Whenever illegal connections, discharges, or dumping are discovered, The Contractor shall notify the Engineer immediately, should take no further action unless ordered and assume that unlabeled or unidentifiable material is hazardous.

The Contractor shall look for the following evidence of illicit connections, illegal discharges, and dumping:

a) Debris or trash piles
b) Staining or discoloration on pavement or soils
c) Pungent odors coming from drainage systems
d) Discoloration or oily sheen on water
e) Stains and residue in ditches, channels, or drain boxes
f) Abnormal water flow during dry weather
g) Excessive sediment deposits

h) Nonstandard drainage junction structures

i) Broken concrete or other disturbances at or near junction structures

7-8.5.5.3 Vehicle and Equipment Cleaning. The Contractor shall limit vehicle and equipment cleaning or washing at the job site except for what is necessary to control vehicle tracking or hazardous waste. The Contractor shall notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam and contain and recycle or dispose of resulting waste under 7-10.4.4. The Contractor shall not use diesel to clean vehicles or equipment and minimize the use of solvents.
The Contractor shall clean or wash vehicles and equipment in a structure equipped with disposal facilities. The Contractor may wash vehicles in an outside area if the area is:

a) Paved with asphalt concrete, HMA, or PCC

b) Surrounded by a containment berm

c) Equipped with a sump to collect and dispose of wash water

The Contractor shall use as little water as practicable whenever washing vehicles and equipment with water and hoses used must be equipped with a positive shutoff valve.

The Contractor shall discharge liquid from wash racks to a recycling system or to another authorized system. Remove liquids and sediment as necessary.

7-8.5.5.4 Vehicle and Equipment Fueling and Maintenance. If practicable, the Contractor shall perform maintenance on vehicles and equipment off-site.

If fueling or maintenance must be done at the job site, the Contractor shall assign a site or sites, and obtain authorization before using them. The Contractor shall minimize mobile fueling and maintenance activities. The Contractor's fueling and maintenance activities must be performed on level ground in areas protected from stormwater run-on and runoff.

The Contractor shall use containment berms or dikes around fueling and maintenance areas. Keep adequate quantities of absorbent spill-cleanup material and spill kits in the fueling or maintenance area and on fueling trucks. The Contractor shall dispose of spill-cleanup material and kits immediately after use and use drip pans or absorbent pads during fueling or maintenance.

The Contractor shall not leave fueling or maintenance areas unattended during fueling and maintenance activities. The Contractor's fueling nozzles must be equipped with an automatic shutoff control. The Contractor shall use equipment with vapor-recovery fueling nozzles where required by the Air Quality Management District, secure nozzles in an upright position when not in use and shall not top off fuel tanks.

The Contractor shall recycle or properly dispose of used batteries and tires.

If leaks cannot be repaired immediately, the Contractor shall remove the vehicle or equipment from the job site.

7-8.5.5.5 Material and Equipment Used Over Water. The Contractor shall place drip pans and absorbent pads under vehicles and equipment used over water, keep an adequate supply of spill-cleanup material with vehicles and equipment, place drip pans

or plastic sheeting under vehicles and equipment on docks, barges, or other surfaces over water whenever vehicles or equipment will be idle for more than one (1) hour.

The Contractor shall furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools and shall secure material to prevent spills or discharge into the water due to wind.

The Contractor shall report discharges to receiving waters immediately upon discovery and shall submit a discharge notification.

7-8.5.5.6 Structure Removal Over or Adjacent to Water. The Contractor shall not allow demolished material to enter storm drain systems and receiving waters, use authorized covers and platforms to collect debris, use attachments on equipment to catch debris during small demolition activities and empty debris-catching devices daily and dispose of debris in accordance with 7-8 of the Standard Specifications and these Special Provisions.

7-8.5.5.7 Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities. The Contractor shall prevent material from entering storm drain systems and receiving waters including:

a) Cementitious material
b) Asphaltic material
c) Aggregate or screenings
d) Saw cutting, grooving, and grinding residue
e) Pavement chunks
f) Shoulder backing
g) Methacrylate
h) Sandblasting residue

The Contractor shall cover drainage inlets and use linear sediment barriers to protect downhill receiving waters until paving, sealing, saw cutting, grooving, and grinding activities are completed and excess material has been removed and cover drainage inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.

Whenever precipitation is forecasted, the Contractor shall limit paving, saw cutting, and grinding to places where runoff can be captured.

The Contractor shall not start seal coat, tack coat, slurry seal, or fog seal activities whenever precipitation is forecasted during the application and curing period and shall not excavate material from existing roadways during precipitation.

The Contractor shall use a vacuum to remove slurry immediately after slurry is produced and shall not allow the slurry to run onto lanes open to traffic or off the pavement.

The Contractor shall collect the residue from PCC grooving and grinding activities with a vacuum attachment on the grinding machine. The Contractor shall not leave the residue on the pavement or allow the residue to flow across pavement.

The Contractor shall not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.

The Contractor shall park paving equipment over drip pans or plastic sheeting with absorbent material to catch drips if the paving equipment is not in use.

7-8.5.5.8 Thermoplastic Striping and Pavement Markers. The Contractor shall not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets and receiving waters.

The Contractor shall not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets and receiving waters.

The Contractor shall collect and dispose of bituminous material from the roadway after removing markers.

7-8.5.5.9 Pile Driving. The Contractor shall keep spill kits and cleanup materials at pile driving locations; park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material; protect pile driving equipment by parking on plywood and covering with plastic whenever precipitation is forecasted.

The Contractor shall store pile driving equipment on level ground and protect it from stormwater run-on when not in use. Use vegetable oil instead of hydraulic fluid if practicable.

7-8.5.5.10 Concrete Curing. The Contractor shall not overspray chemical curing compounds and shall not allow runoff of curing compounds.

The Contractor shall minimize the drift by spraying as close to the concrete as practicable, cover drainage inlets before applying the curing compound, and minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture when concrete is curing.

7-8.5.5.11 Concrete Finishing. The Contractor shall collect and dispose of water and solid waste from high-pressure water blasting, collect and dispose of sand and solid waste from sandblasting. Before sandblasting, the Contractor shall cover drainage inlets within 50 feet of sandblasting, and shall minimize the drift of dust and blast material by keeping the nozzle close to the surface of the concrete. If the character of the blast residue is unknown, the Contractor shall test it for hazardous materials and dispose of it properly.

The Contractor shall inspect containment structures for concrete finishing for damage before each day of use and before forecasted precipitation and remove liquid and solid waste from containment structures after each work shift.

7-8.5.5.12 Sweeping. The Contractor shall sweep by hand or mechanical methods, such as vacuuming, and shall not use methods that use only mechanical kick brooms.

The Contractor shall sweep paved roads at construction entrance and exit locations and paved areas within the job site:

a) During clearing and grubbing activities
b) During earthwork activities
c) During trenching activities
d) During pavement structure activities
e) When vehicles are entering and leaving the job site
f) After soil-disturbing activities
g) After observing off-site tracking of material
h) As deemed necessary by the Engineer

The Contractor shall monitor paved areas and roadways within the project and sweep within:

a) 1 hour whenever sediment or debris is observed during activities that require sweeping.
b) 24 hours whenever sediment or debris is observed during activities that do not require sweeping.

The Contractor shall remove collected material, including sediment, from paved shoulders, drain inlets, curbs and dikes, and other drainage areas, may stockpile collected material at the job site, and shall dispose of collected material at least once per week if stockpiled.

The Contractor shall keep dust to a minimum during street sweeping activities and use water or a vacuum whenever dust generation is excessive or sediment pickup is ineffective.

The Contractor shall remove and dispose of trash collected during sweeping.

7-8.5.5.13 Dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities.

The Contractor shall perform dewatering work as specified for the work items involved, such as temporary active treatment system or dewatering and discharge.

If dewatering and discharging activities are not specified under a work item and the Contractor performs dewatering activities, he shall:

a) Conduct dewatering activities under the Caltrans' *Field Guide for Construction Site Dewatering*.
b) Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.
c) Discharge the water within the project limits if approved by the Engineer. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.
d) Not discharge stormwater or nonstormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface.

e) Notify the Engineer immediately upon discovering any such condition.

7-8.6 Water Pollution Control.

7-8.6.1 General. *ADD the following after the last paragraph:*

This project is Risk Level 2.

ADD:

7-8.6.1.1 Definitions and Abbreviations.

Active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 15 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

Construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

NAL: Numeric Action Level.

NEL: Numeric Effluent Limit.

Normal working hours: The hours the Contractor normally works on this project.

Preparation Manual: The Caltrans' "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

QSD: Qualified SWPPP Developer.

QSP: Qualified SWPPP Practitioner.

Qualified rain event: A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48 hour or greater period between storms.

REAP: Rain Event Action Plan.

SAP: Sampling and Analysis Plan.

SSC: Suspended Sediment Concentration.

SWRCB: State Water Resources Control Board.

WPC: Water Pollution Control.

WPC Manager: The Contractor's Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

7-8.6.1.2 Summary. Section 7-8.6 includes general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.

Information on forms, reports, and other documents can be found in the following Caltrans manuals:

a) *Field Guide for Construction Site Dewatering*

b) *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*

c) *Construction Site Best Management Practices (BMP) Manual*

d) *Construction Site Monitoring Program (CSMP) Guidance Manual*

For the above-referenced manuals, go to the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control at (Informationhttp://www.dot.ca.gov/hq/construc/stormwater/) or the Caltrans' publication distribution unit.

The Contractor shall not start job site activities until:

a) The WPCP or SWPPP, in accordance with 7-8.6.3 of the Special Provisions, is authorized.

b) The waste discharge identification number is issued if the project requires a SWPPP.

c) WPCP or SWPPP review requirements have been fulfilled. If the RWQCB requires time for review, allow 30 days for the review.

If the Contractor operates a Contractor-support facility, the Contractor shall protect stormwater systems or receiving waters from the discharge of potential pollutants by using water pollution control practices.

Contractor-support facilities include:

a) Staging areas

b) Storage yards for equipment and materials

c) Mobile operations

d) Batch plants for PCC and HMA

e) Crushing plants for rock and aggregate

f) Other facilities installed by the Contractor for his, such as haul roads

Discharges from manufacturing facilities, such as batch plants and crushing plants, must comply with the general waste discharge requirements for *Order No. 97-03-DWQ, NPDES General Permit No. CAS000001*, issued by the State Water Resources Control Board for "*Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities*" and referred to herein as "General Industrial Permit." For the General Industrial Permit, go to the Web site for the State Water Resources Control Board.

If the Contractor operates a batch plant to manufacture PCC, HMA, or other material or a crushing plant to produce rock or aggregate, the Contractor shall obtain coverage under the General Industrial Permit. The Contractor must be covered under the General Industrial Permit for batch plants and crushing plants located:

a) Outside of the job site

b) Within the job site that serve 1 or more contracts

If the Contractor obtains or disposes of material at a noncommercially operated borrow or disposal site, the Contractor shall prevent water pollution due to erosion at the site

during and after completion of his activities. Upon completion of his work, the Contractor shall leave the site in a condition such that water will not collect or stand therein.

The Agency does not pay for water pollution control practices at Contractor-support facilities and noncommercially operated borrow or disposal sites.

7-8.6.1.3 Submittals. Within 48 hours after the conclusion of a storm event resulting in a discharge, after a nonstormwater discharge, or after receiving a written notice or an order from the RWQCB or another regulatory agency, the Contractor's WPC manager must submit the following information:

a) Date, time, location and nature of the activity and the cause of the notice or order

b) Type and quantity of discharge

c) Water pollution control practices in use before the discharge or before receiving the notice or order

d) Description of water pollution control practices and corrective actions taken to manage the discharge or cause of the notice

The Contractor shall submit water pollution control training records for all employees and subcontractors who will be working at the job site as an informational submittal that includes the training subjects, training dates, ongoing training, and tailgate meetings with the submittal. The Contractor shall submit records for:

a) Existing employees within 5 business days of obtaining SWPPP or WPCP authorization

b) New employees within 5 business days of receiving the training

c) Subcontractor's employees at least 5 business days before a subcontractor starts work

At least Five (5) business days before operating any Contractor-support facility, the Contractor shall submit:

a) A plan showing the location and quantity of water pollution control practices associated with the Contractor-support facility

b) A copy of the notice of intent approved by the RWQCB and the WPCP or SWPPP approved by the RWQCB if the Contractor will be operating a batch plant or a crushing plant under the General Industrial Permit

7-8.6.1.4 Quality Control and Assurance.

Training

The Contractor shall employees must receive water pollution control training before starting work at the job site.

For the Contractor's project managers, supervisory personnel, subcontractors, and employees involved in water pollution control work:

a) The Contractor shall provide stormwater training in the following subjects:

    1) Water pollution control rules and regulations

    2) Implementation and maintenance for:

(a) Temporary soil stabilization

(b) Temporary sediment control

(c) Tracking control

(d) Wind erosion control

(e) Material pollution prevention and control

(f) Waste management

(g) Nonstormwater management

b) The Contractor shall conduct weekly training meetings covering:

1) Deficiencies and corrective actions for water pollution control practices
2) Water pollution control practices required for work activities during the week
3) Spill prevention and control
4) Material delivery, storage, usage, and disposal
5) Waste management
6) Nonstormwater management procedures

Training for personnel who collect water quality samples must include:

a) CSMP review
b) Health and safety review
c) Sampling simulations

7-8.6.1.5 Water Pollution Control Manager.

General

The Contractor's WPC manager must be a QSP if the project requires a WPCP. The Contractor's WPC manager must be a QSD if the project requires a SWPPP.

The Contractor shall assign one (1) WPC manager to implement the WPCP or SWPPP, whichever is applicable for the project.

Qualifications

The Contractor's QSD must:

a) Have completed the stormwater management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information
b) Be registered or certified for at least one of the following:

1) California registered civil engineer
2) California registered professional geologist or engineering geologist
3) California licensed landscape architect
4) Professional hydrologist registered through the American Institute of Hydrology

5) Certified Professional in Erosion and Sediment Control (CPESC)™ registered through Enviro Cert International, Inc.

6) Certified Professional in Storm Water Quality (CPSWQ)™ registered through Enviro Cert International, Inc.

7) Professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET)

The Contractor's QSP must comply with the qualifications for a QSD or must:

a) Have completed the storm water management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information

b) Be certified for at least one of the following:

1) Certified Erosion, Sediment and Storm Water Inspector (CESSWI)™ registered through Enviro Cert International, Inc.

2) Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.

Responsibilities

The Contractor's WPC manager must:

a) Be responsible for water pollution control work

b) Be the primary contact for water pollution control work

c) Oversee:

1) Maintenance of water pollution control practices

2) Inspections of water pollution control practices identified in the SWPPP or WPCP

3) Inspections and reports for visual monitoring

4) Preparation and implementation of REAPs

5) Sampling and analysis

6) Preparation and submittal of:

(a) NAL exceedance reports

(b) NEL violation reports

(c) SWPPP annual certification

(d) Annual reports

(e) BMP status reports

a) Oversee and enforce hazardous waste management practices, including spill prevention and control measures

b) Have authority to mobilize crews to make immediate repairs to water pollution control practices

c) Ensure that all employees have current water pollution control training

d) Implement the authorized SWPPP or WPCP

e) Amend the SWPPP or WPCP if required

f) Be at the job site within 2 hours of being contacted

g) Have the authority to stop construction activities damaging water pollution control practices or causing water pollution

7-8.6.1.6 Construction.

General

The Contractor shall install facilities and devices used for water pollution control practices before performing work activities. The Contractor shall install soil stabilization materials for water pollution control practices in all work areas that are inactive and before storm events.

The Contractor shall repair or replace water pollution control practices within 24 hours of discovering any damage, unless a longer period is authorized.

The Agency will not pay for the cleanup, repair, removal, disposal, or replacement of water pollution control practices due to improper installation or the Contractor's negligence.

The Contractor shall retain a printed copy of the authorized WPCP or SWPPP at the job site at all times.

Monitoring

The Contractor shall monitor the National Weather Service's forecast on a daily basis. For the National Weather Service's forecast, go to the Web site for the National Weather Service.

Inspections

The Contractor shall use the *Stormwater Site Inspection Report* form for documenting site inspections.

The Contractor's WPC manager must oversee:

a) Inspections of water pollution control practices identified in SWPPP or WPCP:
    1) Before a forecasted storm event
    2) After a qualifying rain event that produces site runoff
    3) At 24-hour intervals during extended storm events
    4) On a predetermined schedule of at least once a week

b) Daily inspections of:
    1) Storage areas for hazardous materials and waste
    2) Hazardous waste disposal and transporting activities
    3) Hazardous material delivery and storage activities

c) Inspections of:
    1) Vehicle and equipment cleaning facilities:
        (a) Daily if vehicle and equipment cleaning occurs daily

(b) Weekly if vehicle and equipment cleaning does not occur daily

2) Vehicle and equipment maintenance and fueling areas:

(a) Daily if vehicle and equipment maintenance and fueling occurs daily

(b) Weekly if vehicle and equipment maintenance and fueling does not occur daily

3) Vehicles and equipment at the job site for leaks and spills on a daily schedule. Verify that operators are inspecting vehicles and equipment each day of use.

4) Demolition sites within 50 feet of storm drain systems and receiving waters daily.

5) Pile driving areas for leaks and spills:

(a) Daily if pile driving occurs daily

(b) Weekly if pile driving does not occur daily

6) Temporary concrete washouts:

(a) Daily if concrete work occurs daily

(b) Weekly if concrete work does not occur daily

7) Paved roads at job site access points for street sweeping:

(a) Daily if earthwork and other sediment or debris-generating activities occur daily

(b) Weekly if earthwork and other sediment or debris-generating activities do not occur daily

(c) Within 24 hours of precipitation forecasted by the National Weather Service

8) Dewatering work:

(a) Daily if dewatering work occurs daily

(b) Weekly if dewatering work does not occur daily

9) Temporary active treatment system:

(a) Daily if temporary active treatment system activities occur daily

(b) Weekly if temporary active treatment system activities do not occur daily

10) Work over water:

(a) Daily if work over water occurs daily

(b) Weekly if work over water does not occur daily

Deficiencies

Whenever the Contractor or the Engineer identify a deficiency in the implementation of the authorized WPCP or SWPPP, The Contractor shall correct the deficiency:

(a) Immediately, unless a later date is authorized

(b) Before precipitation occurs

The Agency may correct the deficiency and deduct the cost of correcting the deficiency from payment if the Contractor fails to correct the deficiency by the agreed date or before the onset of precipitation.

7-8.6.2 Best Management Practices (BMPs). *MODIFY to ADD the following:*
BMPs shall be maintained and/or added based on the REAP and any exceedances of Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs). The Contractor shall make any necessary changes to the SWPPP and implement additional BMPs that will result in effluent levels below that of NALs.

7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP). *DELETE in its entirety and SUBSTITUTE with the following:*

7-8.6.3 Water Pollution Control Plan (WPCP).

7-8.6.3.1 General.

Summary

The Contractor shall prepare a water pollution control plan that includes developing and implementing the WPCP, providing a WPC manager, conducting water pollution control training, and monitoring, inspecting and correcting water pollution control practices.

The Contractor may assign a QSP other than the WPC manager to develop the WPCP.

Submittals

Within 7 days after Contract approval:

a) The Contractor shall submit two (2) copies of his WPCP for review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.

b) The Contractor shall resubmit a revised WPCP within 7 days of receiving the Engineer's comments. The Agency's review resumes when the complete WPCP has been resubmitted.

c) When the Engineer authorizes the WPCP, the Contractor shall submit an electronic copy and 3 printed copies of the authorized WPCP.

d) If the RWQCB requires review of the authorized WPCP, the Engineer submits the authorized WPCP to the RWQCB for its review and comment.

e) If the Engineer orders changes to the WPCP based on the RWQCB's comments, the Contractor shall amend the WPCP within 3 business days.

The WPCP must comply with the Caltrans' *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual* and must:

a) Show the location of disturbed soil areas, water bodies, and water conveyances

b) Describe the work involved in the installation, maintenance, repair, and removal of temporary water pollution control practices

c) Show the locations and types of water pollution control practices that will be used for:

1) Stormwater and nonstormwater in areas outside the job site but related to work activities, including:
    (a) Staging areas
    (b) Storage yards
    (c) Access roads
2) Activities or mobile activities related to all NPDES permits
3) Contractor-support facilities

d) Show the locations and types of temporary water pollution control practices that will be used in the work for each construction phase

e) Show the locations and types of water pollution control practices that will be installed permanently under the Contract

f) Include a schedule showing when:
    1) Work activities will be performed that could cause the discharge of pollutants into stormwater
    2) Water pollution control practices associated with each construction phase will be implemented
    3) Soil stabilization and sediment control practices for disturbed soil areas will be implemented

g) Include a copy of any permits obtained by the Agency, including Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 certifications, aerially deposited lead variance from the Department of Toxic Substance Control, aerially deposited lead variance notification, and RWQCB waste discharge requirements for aerially deposited lead reuse

The Contractor shall amend the WPCP whenever:

a) Changes in work activities could affect the discharge of pollutants

b) Water pollution control practices are added by Change Order work

c) Water pollution control practices are added at the Contractor's discretion

d) Changes in the quantity of disturbed soil are substantial

e) Objectives for reducing or eliminating pollutants in stormwater discharges have not been achieved

f) Project receives a written notice or order from the RWQCB or any other regulatory agency

The Contractor shall allow the same review time for amendments to the WPCP as for the original WPCP.

7-8.6.3.2 Construction. The Contractor shall manage work activities in a way that reduces the discharge of pollutants to surface waters, groundwater, and separate municipal storm sewer systems.

The Contractor shall monitor and inspect water pollution control practices at the job site.

The Contractor shall notify the Engineer within 6 hours whenever any of the following occurs:

a) The Contractor identifies discharges into receiving waters or drainage systems that are causing or could cause water pollution

b) The Contractor receives a written notice or order for the project from the RWQCB or any other regulatory agency

The Contractor shall continue WPCP implementation during any suspension of work activities.

The Contractor is responsible for delays and must pay all costs associated with submitting a SWPPP due to his actions that result in one of the following:

a) 1 or more acres of soil disturbance on projects without an Erosivity Waiver

b) More than 5 acres of soil disturbance on projects with an Erosivity Waiver

c) Failure to comply with the schedule for soil disturbing activities for projects with an Erosivity Waiver if the delays void the Erosivity Waiver

7-8.6.3.3 Payment. Payment for **PREPARE & IMPLEMENT WATER POLLUTION CONTROL PLAN (WPCP)** shall be per the **Lump Sum (LS)** price bid and shall include full compensation for furnishing all labor, materials, tools, equipment to perform all the work involved in 7-8.6, including preparing and modifying a WPCP, permitting fees, Agency filing and processing, furnishing, installing, maintaining and removing BMPs, monitoring and reporting, and all incidentals for doing all the work involved as described herein or as otherwise required by the permit process, and shall be included in the contract lump sum price in the bid. No additional compensation shall be allowed therefor.

Payment will be issued by the Agency as follows:

a) 25% - upon WPCP approval.

b) 25% - upon installation of project BMPs

c) 50% - to be paid monthly as a percentage of the total working days expended for monitoring, maintenance, testing, reporting and all other requirements as outlined in these Special Provisions.

7-8.6.4 Dewatering. *MODIFY to ADD the following:*

Submittals

Before the Contractor starts dewatering, he shall submit a dewatering and discharge work plan. The dewatering and discharge work plan must include:

a) Title sheet and table of contents

b) Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge point

c) Estimated schedule for dewatering and discharge start and end dates of intermittent and continuous activities

d) Discharge alternatives, such as dust control or percolation

e) Visual monitoring procedures with inspection log

f) Copy of written approval to discharge into a sanitary sewer system at least 5 business days before starting discharge activities

The Contractor shall submit the following informational submittals:

a) MSDS at least 5 business days before material is used or stored

b) Monthly inventory records for material used or stored

The Contractor shall submit written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system.

7-8.6.5 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for implementation and maintenance of BMPs and dewatering shall be included in the Contract Unit Price paid for WPCP.

ADD:

7-8.7 Drainage Control. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.

The Contractor shall ensure that storm and drainage water does not pond due to the temporary blockage of existing drainage facilities. To this end, the Contractor shall provide temporary works that allow for the passage of storm and drainage water in a manner equivalent to the existing drainage system.

No separate payment will be made for any work performed or material used in drainage control. Full compensation for such controls shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.8 Graffiti Control. Throughout all phases of Work, including suspension of Work, and until final acceptance, the Contractor shall keep Work, all equipment, field offices, storage facilities, fences, signs, and other facilities free of graffiti. Within twenty-four (24) hours after notification by the Agency Representative, graffiti shall be water blasted and cleaned to original surface or repainted if previously painted.

No separate payment will be made for any work performed or material used in graffiti control. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. *ADD the following before the 1st paragraph:*
Material shown on the Plans or designated in the Special Provisions which is to be salvaged or used in the reconstructed work and which has been damaged or destroyed

as a result of the Contractor's operations, shall be repaired or replaced by the Contractor at his expense.

Contractor shall protect his work and the work of others for the duration of the contract. He shall protect pipes and fittings from direct sunlight and avoid undue bending and any concentrated external loading. Beds on which pipe is stored shall be full length of pipe. Pipe or fittings that have been damaged shall not be used.

ADD:

7-9.1 Preservation of Property. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed.

All damage done to existing improvements by the Contractor shall be repaired by him to the satisfaction of the Engineer. Where sidewalks, curbs or gutters are to be repaired, the repairs shall be made by removing and replacing the damaged section back to the nearest scoring lines.

All trees and shrubbery that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities, and any other improvements of facilities within or adjacent to the work shall be protected from injury or damage, and the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operation, they shall be replaced or restored at the Contractor's expense to its original condition or furnish and install equal replacements.

All existing irrigation systems shall be kept in operation at all times. If the existing system is damaged by Contractor, he shall be responsible for immediate repair of such damage. After each repair, all heads of the repaired system so that the lines can be cleared of all dirt and foreign matter.

The fact that any such pipe or other underground facility is not shown on the Plans shall not relieve the Contractor of his responsibility under this article. It shall be the Contractor's responsibility to ascertain the existence of any underground improvement or facilities which may be subject to damage by reason of his operations.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the work which are in any way affected by the excavations or other operations connected with the performance of the Work.

Whenever any notice is required to be given by the Agency or the Contractor to any adjacent or adjoining landowner or other party before commencement of any work, such notice shall be given by the Contractor.

ADD:

7-9.2 Video Recording and Photographing of Pre-existing Conditions. The Contractor shall video record and photograph pre-existing conditions of the project site prior to any construction activities such as, but not limited to:

a) Property markers
b) Right of way and easement conditions
c) Utility markings and USA markings
d) Existing property damages
e) Survey conditions
f) Pavement conditions, markings, and striping
g) Adjacent property conditions
h) Sidewalk, median, curb, and gutter conditions
i) Safety conditions
j) Unusual conditions or equipment
k) Existing landscape conditions (including vegetation and irrigation) along the project limit.

The Contractor shall submit recordings/photographs on CD, DVD or USB media to the Engineer no later than (five) 5 Working Days after Notice to Proceed.

Payment for video recording and photographing services shall be included in the various Bid Items and no additional compensation will be allowed therefor.

7-10.4.1.2 Work Site Safety Official. *MODIFY to ADD the following:*
Failure by the Contractor to provide the required Work Site Safety Official shall be grounds for the Agency to direct the cessation of all work activities and operations at no cost to the Agency until the Contractor is in compliance.

ADD:

7-10.4.1.3 Emergencies. Unusual conditions may arise on the Work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the Work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from failure or partly completed work.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or property interest, or prevent likely loss of human life or damage on account of the operations under the Contract, then and in that event the Agency may provide suitable protection to said interest by causing such work to be done and material to be furnished as, in the opinion of the Agency Representative may seem reasonable and necessary.

The cost and expense of said labor and material, together with the cost and expense of such repairs as may be deemed necessary, shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefor, duly certified by the Agency Representative, then said cost and expense will be paid by the Agency and shall thereafter be deducted from any amounts due, or which may become due to the Contractor. Failure of the Agency, however, to take such precautionary measure, shall not relieve the Contractor of his full responsibility for public safety.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Agency.

7-10.4.2.1 General. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The Contractor shall submit to the Engineer, as a condition of obtaining City issued permits and in advance of excavation, a permit from the Division of Occupational Safety and Health pursuant to Chapter 6 (commencing with Section 6500) of Part 1 of Division 5 of the Labor Code along with a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five (5) feet or more in depth. The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a notice shall be included stating that the registered civil or structural engineer certifies that the plan complies with the CAL/OSHA Construction Safety Orders. A copy of the plan and permit shall be submitted to the Engineer.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work, and the Contractor shall fully comply with all local, county, state and federal laws, rules, regulations, and orders relating to safety of the public and workers.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from civil or criminal penalties resulting from a failure to comply with applicable safety laws, rules, regulations and orders. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the event of any such failure to comply with applicable safety laws, rules, regulations or orders.

The duty, if any, of the Agency Representative to conduct construction review or inspection of the Contractor's performance is not intended to include review or inspection of the adequacy of the Contractor's safety measures in, on, or near the construction site.

7-10.5.3 Steel Plate Covers. *MODIFY to ADD the following:*
The Contractor shall protect transverse or longitudinal cuts, voids, trenches, holes, and excavations in the right-of-way that cannot be properly completed within one (1) Working Day by adequately designed barricades and structural steel plates (plates) that will support legal vehicle loads in such a way as to preserve unobstructed traffic flow.

The Contractor shall secure approval, in advance, from Engineer concerning the use of any bridging proposed on the Work.

The Contractor shall adequately shore trenches to support the bridging and traffic loads.

The Contractor shall design plates for HS 20-44 truck loading in accordance with Caltrans Bridge Design Specifications Manual.

For the minimum thickness of plates refer to Table 7-10.5.3(A):

Table 7-10.5.3(A) - Trench Width / Minimum Plate Thickness

Trench Width	Minimum Plate Thickness
10"	1/2"
1'-11"	3/4"
2'-7"	7/8"
3'-5"	1"
5'-3"	1 1/4"

For spans greater than 5’-3", submit a structural design prepared by a California Registered Civil Engineer to the Engineer.

The surface of the plates shall be skid-resistant with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342.

The plates shall extend a minimum 12” beyond the edges of the trench.

Plates must provide complete coverage to prevent any person, bicycle, motorcycle or motor vehicle from being endangered due to plate movement causing separations or gaps.

Install and secure plates against movement or displacement by using adjustable cleats, shims, welding, or other devices in a manner that will minimize noise.

The Contractor shall install plates as follows:

Mill the pavement to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Alternative installation method may be submitted in accordance with 2-5.3, “Submittals” for the Engineer’s approval.

The Contractor is responsible for maintenance of the plates and shoring, or any other approved device used to secure the plates. The Contractor shall immediately mobilize necessary personnel and equipment after being notified by the Agency Representative, the Agency Code Enforcement or Police Department of a repair needed e.g., plate movement, noise, anchors, and asphalt ramps. Failure to respond to the emergency request within 2 hours will be grounds for Agency to perform necessary repairs that will be invoiced at actual cost including overhead or $500 per incident, whichever is greater.

When plates are removed, the Contractor shall repair any damage to the pavement with fine graded asphalt concrete mix or slurry seal satisfactory to the Engineer.

Payment for Steel Plate Covers is included in the various bid items of work.

7-11 PATENT FEES AND ROYALTIES. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from all claims, suits or actions of every nature for or on account of the use of any patented materials, equipment devices, or processes. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim, suit or action.

7-13 LAWS TO BE OBSERVED. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall keep itself fully informed of all existing and future State and National laws and County and Municipal ordinances and regulations which in any manner affect those engaged or employed in the Work or the materials used in the Work or which in any way affect the conduct of the Work and of all such order and decrees of bodies or tribunals having any jurisdiction or authority in the Plans, Specifications, or Contract for the Work in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same to the Agency Representative in writing.

The Contractor shall at all times observe and comply with and shall cause all its agents, employees, and subcontractors to observe and comply with all such existing and future laws, ordinances, regulations, orders, and decrees even though such requirements may not be specifically mentioned in the specifications or shown on the Plans, and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by itself, its employees, its agents, or its subcontractors. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim or liability.

As a material part of this Contract, Contractor's and subcontractors' owners and employees agree to be bound by and adhere to the Federal Department of Transportation (DOT) regulations found in Title 49 CFR 382. All Contractor's and subcontractors' owners and employees who are required to hold commercial licenses and/or who are in safety sensitive positions shall be subject to the provisions of the DOT regulations.

ADD:

7-14.1 Property Rights in Materials. Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the Work or the soil, or after payment has been made for materials delivered to the site of the Work, or stored subject to or under the control of the Agency.

ADD:

7-14.2 Warranty of Title. No materials, supplies or equipment for the Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies, and equipment installed and incorporated in the Work and agrees upon completion of all Work to deliver the premises together with all improvements and

appurtenances constructed or placed thereon by him to the Agency free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any persons, firm, or corporation furnishing any material or labor for any work covered by the Contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the Agency.

The provisions of this subsection shall be physically inserted in all subcontracts and material contracts and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

ADD:

7-15 CONTRACTOR'S RESPONSIBILITY FOR THE WORK. Until Acceptance of the Work, the Contractor shall have the responsibility, charge and care of the Work and of the materials to be used therein (including materials for which it has received partial payment or materials which have been furnished by the Agency) and shall bear the risk of injury, loss or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work.

The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the material occasioned by any cause before its completion and acceptance and shall bear the expense thereof. Where necessary to protect the work or materials from damage, the Contractor shall at his expense provides suitable drainage and erects such temporary structures as are necessary to protect the work or materials from damage. The suspension of the work from any cause whatever shall not relieve the Contractor of his responsibility for the work and materials as herein specified. If ordered by the Agency Representative, the Contractor shall at his expense properly store materials which have been partially paid for by the Agency or which have been furnished by the Agency. Such storage by the Contractor shall be on behalf of the Agency, the Agency shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored, except on written authorization from the Agency.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act as though instructed to do so by the Agency.

ADD:

7-16 PROJECT RECORD DOCUMENTS.

7-16.1 Maintenance of Documents and Samples. The Contractor shall maintain one record copy of:

a) Contract Drawings

b) Specifications

c) Addenda

d) Change Orders and Other Modifications to the Contract

e) Reviewed Shop Drawings, Product Data, and Samples

f) Field Test Records

g) Construction Schedules

h) Manufacturer's Certificates

The Contractor shall maintain documents in clean, dry, legible condition and not used for construction purposes.

The Contractor shall keep Record Documents and samples accessible for inspection by Agency Representative. Applications for partial payment will not be approved if the Record Documents are not kept current. The Agency Representative must so verify prior to submittal of each Application for Payment.

ADD:

7-16.2 Recording. The Contractor shall record changes to the plans and discoveries of buried objects at the Work on Record Documents with red ball-point pen, label each Document “PROJECT RECORD” in large printed letters, record information concurrently with construction progress, not conceal any work until required information is recorded and legibly mark each item on Contract Drawings and Shop Drawings to record actual construction, including:

a) Measured depths of elements in relation to fixed datum point

b) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements

c) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction

d) Field changes of dimension and detail

e) Changes made by Contract modifications

f) Details not on original Contract Drawings

g) Previously unknown buried objects

The Contractor shall legibly mark each item to record actual construction, including:

a) Manufacturer, Trade Name, and Catalog Number of each product actually installed, particularly optional items and substitute items

b) Changes made by Addenda or modifications

The Contractor shall maintain other documents per requirements of individual specifications sections.

7-16.3 Submittals. At Contract closeout the Contractor shall deliver Record Documents and samples as specified in 7-16.1. Request for final payment will not be approved until all Record Documents have been delivered.

The submittals shall be transmitted with cover letter with signature of Contractor or authorized representative, listing date, project title and number and number and title of each Record document.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

DELETE in its entirety, not part of this project.

SECTION 9 - MEASUREMENT AND PAYMENT

REVISE as follows:

9-2 LUMP SUM WORK. *DELETE 2nd paragraph in its entirety.*

ADD:

9-2.1 Detailed Schedule. The Contractor shall furnish the Agency a cost break-down for all contract lump sum items. Cost break-down tables shall be submitted to the Agency Representative for acceptance within fifteen (15) days after award of Contract. Cost break-down tables will be approved, in writing, by the Agency Representative before any partial payment will be made for the applicable items involved.

The Contractor shall determine the quantities required to complete the Work shown on the Plans. The quantities and their values shall be included in the cost break-downs submitted to the Agency Representative for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-downs submitted for approval.

The sum of the amounts for the line items of work listed in each cost break-down table for each lump sum item shall be equal to the contract lump sum price bid. Overhead and profit shall be included in each individual line item of work listed in a cost break-down table.

No adjustment in compensation will be made in the contract lump sum prices due to differences between the quantities shown in the cost break-downs furnished by the Contractor and the quantities required to complete the Work as shown on the plans and as specified in the Special Provisions.

Individual line item values in the approved cost break-down tables will be used to determine partial payments during the progress of the Work and as the basis for calculating an adjustment in compensation for the contract lump sum items due to changes in line items of work ordered by the Engineer. When the total of ordered changes to line items of work increases or decreases the lump sum price bid by more than twenty-five percent , the adjustment in compensation for the applicable lump sum item will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 3 of the Standard Specifications and the Special Provisions.

9-3 PAYMENT.

9-3.1 General. *ADD the following at the end of the 2nd paragraph:*
The cost of items of work not listed in the “Schedule of Work and Prices” in the Bidders Proposal shall be considered to be included in the cost of the other work that is listed and no additional compensation will be allowed therefor.

When an item of work is designated as (F) or (S-F) in the “Schedule of Work and Prices”, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity

of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) or (S-F) in the “Schedule of Work and Prices” shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the “Schedule of Work and Prices” for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the “Schedule of Work and Prices.”

ADD:

9-3.1.1 Application for Payment. The Contractor shall use the City of Irvine Certified Invoice for Progress Payment Form; furnished to the Contractor.

The Contractor shall type the required information, follow the schedule of work and bid prices in accepted Bidder's proposal for unit price contract, execute certification by signature of an authorized officer, use data on accepted Schedule of Values for lump sum work, provide dollar value in each column for each line item for portion of work performed, list each authorized Change Order number and dollar amount and adjusted Contract Price, and obtain the Agency Representative concurrence on invoiced amounts prior to submittal for payment.

The Contractor shall follow the following submittal procedures: Submit original and one (1) copy of each Application for Payment at times stipulated in 9-3.2; submit under transmittal letter; include submittal date, project title and number and submit updated Progress Schedule with Application for verification of progress. Incomplete application for payment will be rejected.

When Agency Representative requires substantiating information, the Contractor shall submit data justifying line item amounts in question.

The Contractor shall provide one copy of data with cover letter for each copy of submittal, show application number and date, and line item by number and description.

9-3.2 Partial and Final Payment. *DELETE in their entirety 1st and 2nd paragraphs and SUBSTITUTE with the following:*
Payment for services will be made monthly on approved invoices, with payment terms of net thirty (30) days upon receipt of invoice. The Contractor shall submit invoices within fifteen (15) days from the end of each month on the form (Certified Invoice For Progress Payment) provided by the Agency. This estimate shall include the value of the total amount of the work completed by the Contractor during the calendar month previous to that in which the estimate is made.

When the Work has been completed to the satisfaction of the Engineer, the Contractor shall make a final estimate of the total amount of work done thereunder and the amount to be paid therefor under the terms of the Contract and shall certify to the Agency the amount of the final estimate. If the Agency finds the Work has been completed according to the Contract, the Agency will accept the work, will file a notice of completion, and will pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be retained under the provisions of the Contract and upon receiving signed unconditional releases upon final payment from all subcontractors and material suppliers. All prior progress estimates and payments shall be subject to correction in the final estimate and payment. The project retention release will not be due and payable until the expiration of the 60 days from the date of filing a notice of completion of the Work by the Agency.

Interest penalties are not required on payment delays due to disagreement between the Agency and Contractor over the payment amount or other issues involving contract compliance.

It is mutually agreed between the parties to the Contract that no certificate given or payment made under the Contract shall be conclusive evidence of performance of the Contract and no payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor further agrees that the payment and acceptance of the final amount due under the Contract shall release the Agency, the Agency Representative, the Engineer, and their consultants from any and all claims or liability arising out of the Contract.

ADD:

9-3.2.1 Agency's Right to Withhold Certain Amounts and Make Application Thereof. In addition to the amount which the Agency may retain under the above article on progress payments, the Agency may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor as in the Agency's judgment may be necessary to cover:

a) Payments which may be past due and payable for just claims against the Contractor or any subcontractors for labor or materials furnished in or about the performance of the Work on the project under this Contract.

b) Estimated or actual costs for correcting defective work not remedied.

c) Amounts claimed by the Agency as forfeiture due to delay or other offsets.

d) Any other amounts the Agency is authorized to withhold under the Contract Documents or under applicable law.

The Agency may apply such withheld amount or amounts to the payment of such claims in its discretion. In so doing, the Agency shall be deemed the agent of the Contractor and any payments so made by the Agency shall be considered as a payment made under the Contract by the Agency to the Contractor, and the Agency shall not be liable to the

Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Agency will render to the Contractor a prior account of such funds disbursed in behalf of the Contractor.

ADD:

9-3.2.2 Substitution of Securities. Upon the Contractor's request, the Agency will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code Section 22300 if the Contractor deposits in escrow with a bank acceptable to the Agency, securities eligible for the investment of State funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

a) The Contractor shall bear the expense of the Agency and the Escrow Agent in connection with the escrow deposit made.

b) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts of retention to be paid to the Contractor pursuant to this section.

c) The Contractor shall enter into an escrow agreement satisfactory to the Agency, such agreement shall include provisions governing inter alia;

    1) The amount of securities to be deposited,

    2) The providing of powers of attorney or other documents necessary for the transfer of the securities to be deposited,

    3) Conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to, termination of the Contractor's control over the Work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the Contract,

    4) Decrease in value of securities on deposit, and

    5) The termination of the escrow upon completion of the Contract.

d) The Contractor shall obtain the written consent of the surety of such agreement.

9-3.4 Mobilization *DELETE in its entirety and SUBSTITUTE with the following:*

9-3.4.1 General. Mobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, materials and incidentals to the project site necessary for work on the project and for all other work and operations which must be performed or costs incurred including bonds, insurance, and financing prior to beginning work on the various contract items on the project site.

Mobilization shall also include the cost, time and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition and all other related work as required for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from Agency's Representative.

9-3.4.2 Measurement and Payment. Mobilization is eligible for partial payment if the Contract includes a bid item for mobilization. **Payment** for **Mobilization** shall be per the **Lump Sum (LS)** price bid and shall include obtaining and paying for all permits and business licenses as required from the City of Irvine, State of California and other agencies. The City of Irvine will waive its permit fee. The Contractor shall comply with the requirements specified by each license or permit. No payment for Mobilization will be made until the Contractor's Construction Schedule has been submitted, reviewed and accepted and is current. Progress payments for this item shall be paid in accordance with the percentage completion of the project, and shall include the costs of such mobilization and administration for the entire contract period including construction schedule as specified in these specifications. Payments shall be made upon the basis of the following:

a) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is the lesser, will be included in the estimate for payment.

b) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization or 7.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

c) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 95 percent of the contract item price for mobilization or 9.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

d) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization or 10 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

e) Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount shall be paid.

ADD:

9-4 RESOLUTION OF CONSTRUCTION CLAIMS. Any claims submitted by the Contractor against the Agency for Work covered by this Contract in the amount of $375,000 or less shall be subject to the procedures specified in Public Contract Code § 20104, *et seq*.

ADD:

9-5 PROMPT PAYMENT. In addition to requirements specified elsewhere, the following shall also apply: Subsection (f) of Section 20104.50 of the Public Contract Code, Article 1.7 of Part 3 of Division 2.

ARTICLE 1.7

§ 20104.50 Timely progress payments; legislative intent; interest; payment requests:

a) It is the intent of the Legislature in enacting this section to require all local governments to pay their Contractors on time so that these Contractors can meet their obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is instead a matter of statewide concern.

b) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

c) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

d) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

    1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

    2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request in not proper.

e) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subsection (c).

f) For purposes of this article:

    1) A "local agency" includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

    2) A "progress payment" includes all payments due Contractors, except that portion of the final payment designated by the Contract as retention earnings.

    3) A payment request shall be considered properly executed if funds are available for payment for the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

g) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

PART 3 - CONSTRUCTION METHODS

SECTION 300 – EARTHWORK

300-1 CLEARING AND GRUBBING.

300-1.1 General. *ADD the following:*

Demolition and removal of existing turf, shrubs, groundcovers, weeds and rocks indicated on the Plans. Scrape off finished grade and dispose of off-site. Execute temporary erosion and sedimentation control measures. All items noted for removal shall become the property of the Contractor unless otherwise noted.

ADD the following:

300-1.1.1 Dust Control.
The Contractor at its expense shall take whatever steps, procedures, or means as are required to prevent abnormal dust conditions being caused by its operations in connection with the execution of the Work; and on any unpaved road which the Contractor or any of its subcontractors are using, excavation or fill areas, demolition operations, or other activities. Control shall be by sprinkling, use of dust palliative, modification of operations, or any other means acceptable to agencies having jurisdiction. Unless otherwise approved by the City Representative, the Contractor shall furnish and operate a self-loading motor sweeper with spray nozzle at least twice each working day to keep paved areas acceptably clean whenever construction, including restoration, is incomplete.

306-13 TRENCH RESURFACING.

Trench repair shall be per City Std. Plan 223, Alternative B.

306.13.4 Base Course for Asphalt Concrete Placement. *MODIFY to ADD the following:*

Asphalt Concrete Base Course shall be Type III-B-2, PG 64-10 per Subsection 400-4 of the Standard Specifications.

306.13.5 Finish Course for Asphalt Concrete Placement. *MODIFY to ADD the following:*

Asphalt concrete surface course shall be Asphalt Rubber Hot Mix, ARHM-GG-C. Contractor shall use PG 64-16 asphalt binder.

PG Asphalt binder shall conform to the following requirements:

Aggregate produced from slag resulting from any steel-making process or from air-cooled iron blast furnace slag shall not be used on this project.

306-14 MEASUREMENT.

306.14.7 Permanent Resurfacing. *DELETE in its entirety and SUBSTITUTE with the following:*

Permanent resurfacing will be measured by square feet (SF).

306-14 PAYMENT.

Payment for **TRENCH REPAIR** will be at the contract unit price bid per **Square Feet (SF)** and includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing asphalt concrete, complete in place including cleaning existing surface, placing tack coat, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions.

PART 6 – TEMPORARY TRAFFIC CONTROL

REVISE as follows:

SECTION 600 – ACCESS

600-2 VEHICULAR ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*

Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to the extent that safe access may be provided, and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

Safe, adequate, continuous and unobstructed vehicular access shall be maintained to fire hydrants, residences, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, bus stops, hospitals, etc., unless otherwise approved by the Engineer.

During non-working hours or when work is not scheduled, all roadway lanes shall be returned to their full traffic use by backfilling and paving open trenches unless otherwise approved by the Engineer. At the end of the workday, the Contractor shall remove all Traffic Control Devices not in use.

The Contractor shall replace vehicle loop detectors damaged by the Contractor's operations, at its own expense within 24 hours of the damage. The Contractor shall replace existing loop detectors, shown on the plans to be replaced, within 24 hours from when they are removed from service.

Should the Contractor fail to replace the vehicle loop detectors within 24 hours from when they are damaged or removed from service, or the installed signal loops are not functional, the Agency, at its option and at the Contractor's sole cost and expense, may install such temporary detection methods as may be necessary. The Agency will deduct cost of such work from any monies due the Contractor. Failure of the Agency, however, to install such temporary detection methods, shall not relieve the Contractor of his full responsibility for public safety per 7-10 of the Standard Specifications and the Special Provisions.

If the Contractor proposes temporary alternate detection methods, video or wireless, the Contractor shall provide submittals of the alternate methods for acceptance by the Engineer in accordance with 2-5.3 of the Standard Specifications and the Special Provisions. The cost for providing all temporary detection methods shall be as included in the various items of Work and no additional compensation will be allowed therefor.

600-3 PEDESTRIAN ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*

Safe, adequate, continuous and unobstructed pedestrian access shall be maintained to sidewalks, cross walks, residences, commercial and industrial establishments, churches,

schools, parking lots, service stations, motels, fire and police stations, hospitals, etc., unless other arrangements satisfactory to the Agency have been made by the Contractor and accepted by the Agency. Pedestrian access and paths shall meet federal, state and Agency ADA requirements.

ADD:

600-4 CONSTRUCTION PARKING CONTROL. The Contractor shall control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, owners operations, or construction operations, and monitor parking or construction personnel private vehicles by maintaining free vehicular access to and through parking areas and prohibit parking on or adjacent to access roads, or in non-designated areas.

ADD:

600-5 SITE ACCESS. When entering or leaving roadways carrying public traffic, contractors' equipment, whether empty or loaded, shall in all cases yield to public traffic.

The Contractor shall comply with the following City of Irvine truck route restrictions:

DESIGNATED TRUCK ROUTES - ORD. NO. 92-09

	Name of Street	Portion Designated
a)	Alton Parkway	Sand Canyon Avenue to Irvine Boulevard
b)	Bake Parkway	Rockfield Boulevard to easterly City limit
c)	Barranca Parkway	Red Hill Avenue to Jamboree Road
d)	Campus Drive	Jamboree Road to MacArthur Boulevard
e)	Irvine Boulevard	Culver Drive to Jeffrey Road
f)	Irvine Boulevard	Alton Parkway to easterly City limit
g)	Jamboree Road	Warner Avenue to MacArthur Boulevard
h)	Laguna Canyon Road	Alton Parkway to State Route 133
i)	Laguna Freeway (133)	
j)	MacArthur Boulevard	Daimler Street. to Campus Drive
k)	MacArthur Boulevard	Jamboree Road to Ford Road
l)	Main Street	Jamboree Road to westerly City limit
m)	Red Hill Avenue	Barranca Parkway to San Diego Fwy. (I-405)
n)	Rockfield Boulevard	Bake Parkway to easterly City limit
o)	Sand Canyon Avenue	San Diego Fwy. (I-405) to northerly City limit
p)	San Diego Fwy. (I-405)	
q)	Santa Ana Fwy. (I-5)	

RESTRICTED ROUTES, SEVEN TON (14,000 POUNDS) GROSS WEIGHT - ORD. NOS. 92-09 AND 98-16

Name of Street	Portion Designated

a)	Campus Drive	Jamboree Road to University Drive
b)	Culver Drive	Santa Ana Fwy. (I-5) to northerly City limit
c)	Jeffrey Road	Irvine Center Drive to Santa Ana Fwy. (I-5)
d)	Jeronimo Road	Goodyear to 400 feet westerly of Bake Pkwy.
e)	Toledo Way	Goodyear to 400 feet westerly of Bake Pkwy.
f)	Trabuco Road	400 feet easterly of the northbound Santa Ana Freeway off-ramp near Culver Drive and the easterly City limits
g)	Walnut Avenue	Harvard Avenue to Culver Drive
h)	Harvard Avenue	Walnut Avenue to Irvine Center Drive

THREE TON (6,000 POUNDS) GROSS WEIGHT - ORD. NO. 92-09

	Name of Street	Portion Designated
a)	Bonita Canyon Road/Shady Canyon	Newport Coast Drive to Sunnyhill
b)	Culver Drive	Michelson Drive to Bonita Canyon Road
c)	University Drive	Ridgeline Drive to Harvard Avenue

SECTION 601 – WORK AREA TRAFFIC CONTROL

REVISE as follows:

601-1 GENERAL. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall provide and maintain all construction area traffic controls in accordance with Part 6 of the Standard Specifications, the latest version of the (MUTCD), and Work Area Traffic Control Handbook (WATCH), and these Special Provisions.

Portable delineators (traffic cones are not allowed) which conform to the current California Manual of Uniform Traffic Control Devices (CA MUTCD) shall be spaced as necessary for proper delineation of the travel way. The spacing between delineators shall not exceed 50 feet. The minimum lane transitions shall be a 50 to 1 taper unless otherwise shown on the plans. Double base delineators will be required.

If the portable delineators are damaged, displaced or are not in an upright position, from any cause, said portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Where construction detours and signing conflict with existing signing, the Contractor shall cover existing signs in a manner approved by the Agency's Representative. The Contractor shall also provide temporary traffic delineation per 602 at the conclusion of each working day, if not sooner, as directed by the Agency's Representative, for any centerline, painted median or lane line which is obliterated by construction.

The Contractor shall provide temporary delineation as directed/accepted. Temporary delineation shall include removal of conflicting markings by accepted means; installation

and removal of temporary centerlines or lane lines, detour signing, barricading; and replacement of traffic lines and markings in their proper locations upon termination of the detour. Conflicting existing and temporary striping, as required for traffic control during construction, shall be removed by the Contractor by methods accepted by the Engineer. Blacking out the pavement will not be allowed. Temporary reflective striping tape may be used, except that it shall not be applied to final asphalt surfaces. Tape shall be removed from temporary surfaces prior to placement of additional asphalt. The Contractor shall maintain a 24-hour emergency service to remove, install, relocate, and maintain warning devices and shall furnish to the Agency's Representative, names and telephone numbers of three persons responsible for this emergency service. In the event the Contractor does not promptly respond when notified, the Agency may make corrections at Contractor's expense.

Each workday, the Contractor shall ensure traffic control is in place prior to starting construction.

Should the Contractor appear, in the opinion of the Engineer, to be lacking in providing adequate warning devices and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor, at his/her expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.

The Contractor shall notify local Police and Fire Departments of its intent to begin work at each location at least ten (10) days before work is to begin. The Contractor shall cooperate with local authorities relative to handling traffic through the area. The Contractor shall also coordinate with OCTA to ensure the safe operation of buses and access to bus stops in the construction area.

No work that interferes with public traffic shall be performed except during the hours specified for lane closures 601-6.6.

Existing traffic loop detector replacement shall be required as necessary such that no traffic signal loop is out of operation at the end of the workday. The cost for providing all temporary traffic signal loop detectors shall be included into the various related items of work and no additional compensation will be allowed; this includes traffic signal loop detectors damaged by the Contractor's operations not designated for replacement in the contract plans.

Areas requiring edge cold mill shall be cold milled not more than three (3) Calendar Days prior to AC paving. Areas requiring digouts shall be repaved and open for traffic at the end of the same day.

The Contractor shall maintain access to all driveways at all times.

601-3 PAYMENT. *MODIFY to ADD the following:*

The contract **Lump Sum (LS)** price paid for **Traffic Control** includes full compensation for furnishing all labor, materials, tools, equipment and incidentals and doing all the

work involved in all temporary traffic control related work involving placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of traffic control system, complete in place, temporary Asphalt Concrete including installation and removal; all associated temporary signing and striping; flashing arrow signs; flagging and/or flagger costs; and project notifications, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

ADD:

601-4 STREET CLOSURE, DETOURS, BARRICADES. Unless shown on the plans, no street closure shall be allowed.

The Contractor shall construct the proposed improvements to minimize public inconvenience. The Contractor shall provide ADA accessible pedestrian detours around construction areas.

The Contractor shall have all Traffic Control Devices properly installed prior to commencing construction and shall maintain these devices to ensure proper flow and safety of traffic while working in the street.

The contractor shall be responsible for any additional Traffic Control Devices deemed necessary by the Engineer to assure public safety at all times.

ADD:

601-5 STORAGE OF EQUIPMENT. Unless otherwise authorized in writing by the Engineer, construction materials may not be stored in streets, roads, or highways beyond the end of each Working Day. No equipment shall be stored within limits of the acquired temporary construction easements at any time.

Construction equipment shall not be stored at the work site before its actual use on the Work nor for more than two (2) Calendar Days after it is no longer needed on the Work. Time necessary for repair or assembly of equipment may be authorized by the Agency.

Excavated materials, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, temporary construction easements, or highway unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

The Contractor shall submit an equipment-staging plan for approval by the Engineer. The plan shall address the use of private property for the staging, unloading, loading, and storing of equipment. The Contractor shall obtain an agreement from private property owners prior to the start of the project. The agreement shall release and hold the Agency, the Engineer, the Agency Representative and their consultants harmless from claims for damages. Failure to file a plan or obtain written approval from private property owners is considered a breach of Contract and subject to all remedies and enforcement procedures specified in the Contract Documents.

ADD:

601-6 TRAFFIC REGULATIONS.

601-6.1 General. Furnish, install and maintain Traffic Control Devices, equipment, materials, and other safeguards to provide safe and effective work areas, and to warn, control, protect and expedite vehicular and pedestrian traffic.

On daily basis, remove temporary traffic delineation, signage and other devices when no longer required. Restore areas to original or to specified conditions.

601-6.2 Related Requirements. Traffic control work and Traffic Control Devices for construction shall conform to the latest edition of:

a) MUTCD
b) Work Area Traffic Control Handbook (WATCH manual)
c) Standard Specifications
d) O.S.H.A. requirements
e) California Vehicle Code

601-6.3 Construction Area Signs. The Contractor shall:

a) Use only signs that conform to the dimension, color, legend, reflectorization and lighting requirements of the current WATCH, MUTCD and the Contract Documents.
b) All sign panels shall be the product of a commercial sign manufacturer, but need not be new. Used sign panels clean and in good repair, as determined by the Agency Representative, may be used.
c) Sign panels for portable signs may be metal, cotton drill fabric, flexible industrial nylon fabric or other approved fabric.
d) Temporary stop signs shall have a minimum clearance of seven (7) ft. from bottom of sign to existing ground or pavement.
e) Further requirements as discussed in the Contract Documents.

601-6.4 Flaggers. The Contractor shall provide flaggers as deemed necessary by the Engineer to give adequate warning to traffic or to the public of any dangerous conditions to be encountered, and employ only flaggers trained in flagging fundamentals and procedures referred to in the “Flagger Handbook” available on the Internet at the following web site: http://www.dot.ca.gov/hq/construc/flagging/flaggerhandbook2007.pdf.

Payment for flagging is considered as included in the various items of work and no additional compensation will be allowed therefor.

601-6.5 Temporary Closure of Existing Traffic Lanes. Unless the traffic control, working hours and lane requirements are modified in the Special Provisions, the following requirements shall be followed:

a) When permitted by the Engineer, one (1) lane on each roadway adjacent to the working area may be closed to public traffic. Use of reflective or lighted traffic delineators to direct traffic away from excavations or other obstructions will be considered as a lane closure.

b) A minimum of one (1) lane of traffic, twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times.

c) A minimum of two (2) lanes of traffic, each being twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times when the work area is within a major arterial highway unless otherwise approved.

d) When work is in progress within three (3) feet of a lane being used by public traffic, Contractor shall close the lane adjacent to the work. Reflective or lighted traffic delineators shall be placed to direct public traffic around the construction area in accordance with the requirements of this section. During non-working hours or when work is not in progress, position and maintain reflective traffic delineators in the 1 to 1-1/2 foot width of the existing traffic lane adjacent to the work.

e) On roads open to public travel, temporary lane closures are limited between the hours of 9:00 a.m. and 3:00 p.m. Closures of roads on Sundays, holidays, or between the hours of 3:00 p.m. and 9:00 a.m. are prohibited unless otherwise approved by the Engineer.

All Traffic Control Devices used between dusk and 6:00 a.m. shall be lighted or reflectorized. Agency approved arrow board(s) shall be used to direct public traffic on all roads.

Prior to the start of each work day, the Contractor shall perform all necessary work incidental to and commensurate with the proper signing, detouring, barricading, etc., that is required for that particular day's schedule of operations. No construction shall be permitted until such signing and detouring operations have been completed.

601-6.6 Lane Requirements/Working Hours.

Working Hours: 7:00 a.m. to 3:30 p.m.
Monday through Friday: 7:00 a.m. to 3:30 p.m.
Saturday: 9:00 a.m. to 6:00 p.m.
Sunday: No work permitted
Legal holidays: No work permitted

Work requiring lane closures may be in progress during the following hours:
Monday through Friday: 9:00 a.m. to 3:00 p.m.
Saturday: 9:00 a.m. to 3:00 p.m.
Sunday: No work permitted
Legal holidays: No work permitted

Lane closures are permitted and will only occur in accordance with the lane closure chart below, unless otherwise approved by the Engineer.

CHART NO. 1

Lane Closure Chart
Lane Requirements

City: Irvine
Closure Limits: University Drive & Culver Drive

From Hour to Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N
Fridays	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N
Saturdays	N	N	N	N	N	N	N	N	N	2	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N
Sundays	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Legend:
2 Provide at least two (2) lanes open in direction of travel.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

CHART NO. 2

Lane Closure Chart
Lane Requirements

City: Irvine
Closure Limits: All other roads within project limits.

From Hour to Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N
Fridays	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N
Saturdays	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N
Sundays	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Legend:
1 Provide at least one (1) lane open in direction of travel.
N No lane closure allowed

REMARKS:
1. The Closure starts with the first cone down and ends with the last cone picked up.
2. No closure signs shall be exposed to public traffic more than 15 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. Construction safety zone guidelines shall apply at all times.
4. Traffic control and traffic control devices shall be in accordance with the latest edition of MUTCD and WATCH.

601-6.7 Closure Schedule. The Engineer shall be provided a list of any street lane closures, ramp closures, trail closures, sidewalk closures or detours for review and acceptance at least three (3) weeks advance of the closure.

Contractor shall submit a written schedule of planned closures utilizing the closure schedule request form, furnished by the Engineer. The closure schedule shall show the number of lanes, locations and times of the proposed closures, a precise description of work to be performed. Closure schedules submitted to the Engineer with incomplete or inaccurate information will be rejected and returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Upon approval of the closure schedule by the Engineer and at least three (3) Working Days in advance of closing a lane, the Contractor shall notify the Police, Fire, Orange County Transportation Authority (OCTA) bus service, the Agency Representative and all other affected jurisdictional agencies, and comply with their requirements.

Closure schedule amendments, including adding additional closures, shall be submitted by noon to the Engineer, in writing, at least five (5) Working Days in advance of a planned closure. Approval of closure schedule amendments will be at the discretion of the Engineer.

The Engineer, the Police, Fire, Orange County Transportation Authority (OCTA) bus service, and all other affected jurisdictional agencies shall be notified of cancelled closures two (2) Working Days before the date of closure

The Contractor shall notify by email the City of Irvine four (4) Working Days prior to commencing any work within 250 feet of any signalized intersection (measured from the nearest cross street curb), implementing any road closure, and/or implementing any detour of traffic. Email notifications shall be sent to roadworkcoordination@cityofirvine.org.

Closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer.

601-6.8 Late Reopening of Closures and Required Contingency Plan. If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in 6-3 of the Special Provisions. No further closures shall to be made until the Engineer has accepted a contingency plan, submitted by the Contractor that will ensure future closures will be reopened to public traffic at the specified time. A detailed contingency plan shall be prepared and submitted to the Engineer within one business day of the Engineer's request. The Engineer will have two (2) Working Days to accept or reject the Contractor's proposed contingency plan. The Contractor will not be entitled to compensation for the suspension of work resulting from the late reopening of closures.

601-6.9 Compensation. The Engineer shall be notified of delays in the Contractor's operations due to the following conditions:

a) The Contractor's proposed closure schedule is denied and his planned closures are within the time frame allowed for closures in the Special Provisions, except that the Contractor will not be entitled to compensation for amendments requested by the Contractor to the closure schedule that are not approved.

b) The Contractor is denied a confirmed closure.

If, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of these conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, the delay will be considered a right of way delay and will be compensated in conformance with the provisions in 2-8 of the Standard Specifications and the Special Provisions.

Should the Engineer direct the Contractor to remove a closure before the time designated in the approved closure schedule, delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay and compensation for the delay will be determined in conformance with the provisions in 2-8 of the Standard Specifications and these Provisions.

601-10 AUTHORITY OF AGENCY REPRESENTATIVE. Provisions of this section may be modified or altered if, in the opinion of the Agency Representative, public traffic will be better served and work expedited.

601-10.1 Execution. The Contractor shall field check all temporary traffic control signs, barricades, and other devices at least three (3) times every day, including Saturdays, Sundays and holidays to insure their proper maintenance and conformance to the Contract Documents and detailed instructions by the Agency Representative.

Should Contractor fail to properly place and/or maintain delineated lane closures or work areas, the Agency, at its option and at Contractor's sole cost and expense, may place delineation, barricades, or other devices, as may be necessary, to protect the public. Agency may in its discretion withhold the cost of such work from any monies due the Contractor at an amount equal to the rates shown below:

<u>Delineation</u>	
Delineator	$2.00/day plus-labor & equipment
Lighted Barricade	$5.00/day plus-labor & equipment
8 Foot Wood Barricade	$7.50/day plus-labor & equipment
Temporary Signs	$25.00/day plus-labor & equipment
Type III Barricade	$10.00/day plus-labor & equipment
<u>Labor (2 Hour Minimum) - Regular Time</u>	
Lead Street Maintenance Technician	$52.88
Street Maintenance Technician	$40.82
Equipment Operator I	$46.14
Equipment Operator II	$49.74
Street Maintenance Supervisor	$62.99
Street Superintendent	$79.80
<u>Equipment</u>	
Arrow Board	$15.00/hour

Pickup	$10.00/hour
Sweeper	$45.00/hour
5-Yard Dump	$25.00/hour
Loader	$25.00/hour
Water Truck	$25.00/hour
1-Ton Truck	$10.00/hour

Agency shall have no obligation to Contractor with respect to Agency's decision whether or not to exercise Agency's options pursuant to this subsection.

ADD:

601-11 PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS). Portable changeable message signs shall be furnished, placed, operated, and maintained as designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these Provisions. The Contractor shall furnish (3) (three) PCMS. PCMS shall be in place a minimum of two (2) weeks prior to start of construction.

Approximate locations of the PCMS are as follows:

a) Barranca Parkway (nearest intersection Harvard Avenue)
b) Alton Parkway ((nearest intersection Harvard Avenue)
c) Main St. (nearest intersection Veneto Street)

601-11.1 Payment. Full compensation for conforming to the requirements for PCMS, including furnishing all labor, tools, equipment, materials and incidentals required for doing all the work involved in furnishing, installing, maintaining, relocating, changing sign message (regardless of the number of times directed by the Engineer), replacing, repairing, and when no longer required, removing of all PCMS as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, shall be considered as included in the Contract **Lump Sum** price paid for **Traffic Control** and no separate compensation will be allowed therefor.

601-12 FLASHING ARROW SIGNS. Flashing arrow sign shall be mounted on a truck or on a trailer and shall be capable of operating while the vehicle is moving or as directed by the Engineer. Signs mounted on the cab of a truck shall be mounted to provide a minimum of 7 feet between the bottom of the sign and the roadway. Signs mounted on a trailer, or on anything other than the cab of a truck, shall be mounted to provide a minimum of 8 feet between the bottom of the sign and the roadway.

The total weight of trailer mounted flashing arrow sign including the trailer, sign, power source and other components shall not exceed 1,500 pounds and the height of the level trailer bed shall be no higher than 21 inches above the roadway. The trailer shall be equipped with a minimum of 3 leveling jacks.

Electrical energy to operate the sign shall be obtained from the vehicle on which the sign is mounted. The supply of electrical energy shall be capable of operating the sign

in the manner specified. The electronic circuitry shall provide between 30 and 45 complete operating cycles of the sign per minute in each of the modes specified.

Alternative types of lamps may be used in flashing arrow signs if visibility is equal to the specified lamps. Each type AX flashing arrow sign shall be a minimum of 2 feet high and 4 feet wide, and shall be furnished with flat black enamel. A minimum of 13 No. 4414AX 12-volt, yellow or amber lamps shall be installed in the panel. The lamp configuration shall be for 3 arrowheads or an arrow shaft with 2 arrowheads, one pointing in each direction on the face of the sign with a minimum of 5 lamps forming each arrowhead. Each lamp shall be provided with a visor.

The lamp shall be activated by a switch on a control panel and shall be controlled by electronic circuitry to provide a minimum of 4 selectable modes of operation as follows:

Pass Left Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the left or a flashing left arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Pass Right Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the right or a flashing right arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Simultaneous Mode - Either the outside arrowheads pointing in opposite directions are continuously illuminated, except for the center lamp forming each arrowhead, while the arrow shaft lamps flash on and off simultaneously or the outside arrowhead pointing in opposite directions and the arrow shaft lamps all flash simultaneously to indicate passing on either side.

Travel Mode - Travel or caution mode shall flash in a manner not resembling any other mode.

Full compensation for conforming to the requirements of this section shall be considered as part of Bid Item **Traffic Control** and no additional compensation will be allowed therefore.

SECTION 800 – LANDSCAPING AND IRRIGATION MATERIALS

800-1 LANDSCAPE MATERIALS.
ADD the following after 800-1 section header:

Any requirements noted on the Plans that contradict, do not agree with, or modify this subsection are to be immediately brought to the attention of the Engineer. The Engineer shall decide which requirement governs.

800-1.1 Topsoil. *DELETE in its entirety.*

800-1.2 Soil Fertilizing and Conditioning Materials.

800-1.2.2 Manure. *DELETE in its entirety.*

800-1.2.3 Commercial Fertilizer. *Delete in its entirety and SUBSTITUTE with the following:*

Commercial fertilizer shall comply with applicable requirements of the State Agricultural Code and shall be free-flowing material , packaged (delivered in unopened sacks), first grade, commercial quality products identified as to source, type of material, weight and manufacturer's guaranteed analysis. Fertilizers shall not contain toxic ingredients in quantities harmful to human, animal, or plant life. Contractor shall furnish the Engineer with a Certificate of Compliance stating that the material substantially meets the specifications.

Material which becomes caked or otherwise damaged shall not be used. Exact composition and type of fertilizer to be determined by the agronomic soils test and will be supplied by the Contractor at no additional cost to the City. Organic/JTM Complete is the City's preferred fertilizer.

Plant tablets shall be TriC Organics, or approved equal, 17-9-5 applied at the following rates:

Tablet Size	1.7 Gram					
Container Size	1 Gallon	2 Gallon	5 Gallon	15 Gallon	24” Box	Tuffy Plugs
Application Rates (No. of Tablets)	2	4	8	16	22	1

800-1.2.4 Organic Soil Amendment. *DELETE in its entirety and SUBSTITUTE with the following:*

Type 1 shall be used.

Organic humic compost must contain a minimum of 20% humic acid and shall be free of wood products. JTM Activator Calcium shall be added to achieve an application rate of 40 lbs./1 ,000 s.f. Import topsoil shall not be delivered to the site prior to City approval. The City may request additional testing of imported topsoil at the site to determine conformance to the approved report. Rejected topsoil shall be removed at no cost to the City.

Topsoil

a. Soil to be used as a planting medium shall be fertile, well-drained, of uniform quality, and free of stones over 1-inch diameter, sticks, oils, chemicals, plaster, concrete, or other deleterious materials.
b. Imported topsoil shall be from sources approved by the City Inspector which meet the standards specified above.
c. The Contractor shall provide for the testing of proposed topsoil by a certified agronomic soils testing laboratory and shall submit soils analysis, recommendations and topsoil sample to the City Inspector for approval.
d. If stockpiling is requested, locations and amounts of stockpile shall be approved by the City Inspector.

800-1.2.5 Mulch. *DELETE in its entirety and SUBSTITUTE with the following:*

Contractor shall install 2" thick layer of mulch in all planter areas. Install mulch per City Std Plans #601, 602, 606, and 607. Mulch shall be installed after the planting of shrubs and ground cover.

The Contractor shall maintain a 6" clear "no-mulch" zone around the base of each new and existing shrub and tree.

Mulch to be "Forest Floor" (0-2"), or approved equal:

A. Available from:
   Tierra Verde Industries
   7982 Irvine Boulevard
   Irvine, CA 92618
   (714) 786-9558
B. Product shall be woodchips ½" to 3" in length, meet Caltrans Standard Specifications 20-2.08 for Mulch, contain only toxic free mineral based colorant, and contain reused City of Irvine Green Waste.
C. The Contractor shall submit one sample of mulch materials for City approval.
D. The Engineer has the right to reject all samples and request.

800-1.3 Seed. *DELETE in its entirety.*

ADD:

800-1.3.1 Organic Fertilizer

Must be a pelleted or granular form and must be one of the following:

Organic Fertilizer

Products	Guaranteed Chemical Analysis (N-P-K) (%)	Company
Biosol Mix® - Granular	7-2-3	Rocky Mountains Bioproducts Edwards, CO
Approved Equal[1]	(N) 7 (P) 2 (K) 1	

[1]Approved equal must be within the ranges shown for N-P-K. The cumulative (N) release rate must be no more than 70 percent the first 70 days after incubation (86° F) with 100 percent at 350 days or more.

Plant tablets shall be slow release type with potential acidity of not more than 5 percent by weight.

800-1.4 Plants.

800-1.4.1 General. *MODIFY to ADD the following after the first paragraph:*

Inspection and approval of trees is required. Engineer may reject entire lot of trees represented by defective samples. Trees not approved are to be removed from the project site immediately and replaced with suitable trees. All trees will be inspected at the work site prior to installation.

Plant varieties and sizes shall be as specified on the Plans.

All quantities shall be verified by an actual count on the Plans.

Trees shall have been grown in nurseries inspected by the State Department of Agriculture.

800-1.4.4 Flatted Plants. *DELETE in its entirety.*

800-1.4.5 Sod and Stolons (turf grass). *DELETE in its entirety.*

800-1.4.6 Cuttings. *DELETE in its entirety.*

ADD:

800-1.4.7 Replacement Planting. Contractor shall replace in kind any removed, disturbed, injured, or damaged planting during construction. Replacement planting must comply with the original planting specifications, sizes, and spacing for the plants being replaced.

800-1.5 Headers, Stakes, and Ties.

800-1.5.1 General.

800-1.5.2 Headers and Stakes. *DELETE in its entirety.*

800-1.5.3 Tree Stakes. *DELETE in its entirety and SUBSTITUTE with the following:*

The type of tree stake shall be Lodgepole Pine stakes. The tree support stakes shall be 10 feet (3 m) long.

Provide stakes as indicated on Plans and in accordance with City Standard Plans 606 and 607, or as approved equal.

ADD:

800-1.6 LANDSCAPE PRODUCT SUBMITTALS.

800-1.6.1 Product Information and Samples.

Prior to installation, the Contractor shall submit to the City Inspector one (1) copy of the manufacturer's literature, and laboratory analytical data for the following items:

1) Organic amendments (batch reports)
2) Import soil
3) Commercial fertilizer
4) Mulch
5) Plant material as to specie and variety

ADD:

800-1.7 MISCELLANEOUS LANDSCAPE MATERIALS.

800-1.7.1 General

Whenever a material or process is delineated or specified by patent, proprietary name or process, or manufacturer's name, such specifications are used for the purpose of the facilitating the description of material or process desired. Approved equals are acceptable as approved by the Engineer. Suppliers and manufacturer's directions, specifications, and recommendations will be followed in all cases where the materials used furnish directions and cover points not delineated on the Plans or in the Specifications. The specifications only indicate the quality and workmanship to be performed rather than a detailed description of the performance of the work. In the event of any discrepancies between the Plans or Specifications, the final decision as to which will be followed shall be made by the Engineer, the installation shall be rectified by the Contractor at no additional cost to the City.

All workmanship and materials incorporated shall be the best available grade of their respective kind. Provide a sample of each material specified. Accepted samples may be used in the Work. Submit three (3) sets of a type written list of materials as specified to the Engineer within twenty-one (21) days after award of contract. This list shall give the

name, material number, and the manufacturer, and shall be accompanied by cut sheets or reproductions of catalog pages for all of the material to be installed. Approval of substitutions will not relieve the Contractor from complying with the requirements of the Contract Documents, Plans and Specifications. Pay at Contractor's sole expense for all changes caused by approved substitution which affect other items of work.

800-1.7.2 Herbicide.
Organic herbicide for weed abatement shall be Suppress EC, or approved equal.

800-1.7.3 Pre-emergent.
Pre-emergent weed control material shall be organic.

800-2 IRRIGATION SYSTEM MATERIALS. *MODIFY to ADD the following:*

Materials and equipment installed or furnished shall be new. Any materials or equipment that do not meet the City standards shall be rejected and shall be removed from the site at no expense to the City.

800-2.1 Pipe and Fittings.

800-2.1.1 General. *MODIFY to ADD the following after the first paragraph:*

Pressure supply line from point of connection through backflow prevention unit for domestic water systems, and through the strainer/pressure regulator assembly on reclaimed water systems shall be brass, copper or other materials approved by the City.

All PVC pipe and fittings shall comply with the Irvine Ranch Water District's specifications.

All threaded pipe shall be threaded by the manufacturer of the pipe.

800-2.1.2 Steel Pipe. *DELETE in its entirety.*

800-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings.
ADD the following:

Pressure supply lines and fittings 1 ½ inch diameter and smaller, downstream of backflow prevention unit on domestic water systems or strainer/pressure regulator assembly on reclaimed water systems shall be Schedule 40 PVC connected with primer and solvent cement pursuant to manufacturer's specifications. Fittings shall be manufactured by *Dura* or approved equal with gusseted 90's and tees.

PVC pipe 2 inch, 2 ½ inch and 3 inch in diameter shall be Class 315, connected with primer and solvent cement pursuant to manufacturer's specifications. Fittings shall be manufactured by *Dura* or approved equal with gusseted 90's and tees.

PVC pipe 4 inch and larger in diameter shall be Class 200, connected with rubber gasketed bell and spigot connections. The insertion mark shall be visible to show proper depths into spigot. Thrust blocks shall be provided at

each angle and shall be installed in accordance with the manufacturer's recommendations.

Non-pressure lines shall be Schedule 40 PVC.

Above-ground pipe and fittings shall be Ultra-Violet Resistant (UVR-PVC) installed in accordance with Standard Plans 502, 503 and 504.

Plastic pipe shall bear the following markings:

1) Manufacturer's name
2) Nominal pipe size
3) Schedule or class
4) Type of material
5) Pressure rating *(in psi)*
6) NSF seal of approval
7) Date of extrusion

PVC solvent weld fittings shall be Schedule 40.

Threaded nipples shall be standard weight Schedule 80 with molded threads.

Separate primer and solvent cement applications shall be required for all plastic pipe joints in accordance with manufacturer's recommendations.

Sprinkler head swing assemblies shall be triple swing units with Schedule 80 threaded nipples, Schedule 40 street ells with Male Iron Pipe Thread (MIPT) Inlet and Outlet. Lay length shall be 6 inches minimum. No marlex fittings are allowed.

800-2.1.4 Plastic Pipe for Use with Rubber Ring Gaskets. *DELETE in its entirety.*

800-2.1.5 Copper Pipe. *DELETE in its entirety and SUBSTITUTE with the following:*

Copper pipe shall be Type "K," hard tempered ASTM B 88 and fittings shall be wrought solder joint type in accordance with ANSI B16.22. Joints shall be soldered with silver solder, conforming to ASTM B 206.

800-2.2 Valves and Valve Boxes.

800-2.2.1 General.

800-2.2.2 Gate Valves. *DELETE in its entirety and SUBSTITUTE with the following:*

Gate valves, 2 inch diameter or smaller, shall have bronze bodies, non-rising stems and brass cross handles. Gate valves shall be Nibco Class 125, T-113, threaded or approved equal installed in accordance with City Standard Plan No. 506.

Gate valves, 2 ½ inch diameter and larger, shall be AWWA approved and have flanged connections, a 2-inch square operating nut, epoxy coated cast iron bodies resilient wedge gate and stainless steel fasteners and have an arrow cast in metal indicating the direction of water flow. Unit shall have stainless steel bolts, nuts and washers and full

face gaskets for connecting flanges. Gate valves shall be Nibco F-619-RW-SON or approved equal installed in accordance with Standard Plan No. 507.

Class 312 stainless steel nuts and bolts with full face gaskets shall be used to connect all flanged connections.

800-2.2.3 Manual Control Valves. *DELETE in its entirety.*

800-2.2.4 Remote Control Valves. *ADD the following:*

Remote control valves shall be epoxy-coated Griswold 2000 Series or approved equal and shall be installed in accordance with City Standard Plan No. 510.

800-2.2.5 Garden Valves. *DELETE in its entirety.*

800-2.2.6 Quick-Coupling Valves and Assemblies. *ADD the following:*

For use on reclaimed water systems, quick coupler valves shall be in accordance with IRWD standards, with a purple hinged cover. Quick coupling valves shall be Nelson/Signature 7645, or approved equal.

Quick coupler valves shall be installed in accordance with City Std Plan 508.

800-2.2.7 Valve Boxes. *ADD the following:*

Valve boxes shall be fabricated from a durable plastic material resistant to weather, sunlight and chemical action of soils. They shall be green in color. The cover shall be secured with a stainless steel bolt down mechanism. The cover shall be capable of sustaining a load of 1,500 psi. Valve box extensions shall be by the same manufacturer as the valve box. All valve boxes shall be as manufactured by Ametek, Carson, or an approved equal. Covers shall be heat branded with 2 inch high letters in accordance with the appropriate Standard Plan.

Valve boxes for the basket strainer/pressure regulating valve assembly shall be sized to fit the assembly including sufficient working space to repair or remove the unit installed in accordance with Standard Plan 505A. Strainer/pressure regulating/master valve assemblies 3-inch and larger shall require a high density polyethylene vault with a high density polyethylene cover. The cover shall be secured with a stainless steel bolt down mechanism. All valve boxes shall be as manufactured by Carson, or an approved equal. L-Series 24-Vaults with #2448-30 or #2460-30 cover.

ADD:

800-2.2.8 Master Valve with Pressure Regulation Valve.

Pressure reducing valve shall be Cla-val Model 93-01G/BCHSY-KC with pressure reducing solenoid Model number ASCO#8320G132 24v AC, normally closed energized to open master valve with 30-300 psi pressure adjusting range or approved equal. Spring range and pressure setting shall be as noted on irrigation drawings. Pressure reducing valves shall be installed in accordance with Standard Plan No. 505A.

800-2.3 Backflow Preventer Assemblies. *DELETE in its entirety.*

Backflow preventer assemblies shall consist of a backflow preventer unit and related components conforming to IRWD Std Plan W-7.

800-2.4 Sprinkler Equipment. *REPLACE the first sentence with the following:*

Sprinkler heads, bubbler heads, spray nozzles, and drip emitters shall be of the types and sizes shown on the Plans.

ADD:

800-2.5 Basket Strainer.

Basket strainer shall be Watts Model 97FB-CSSIB with flanged stainless steel body and 30 mesh stainless steel screen; basket shall have 1/10 perforations. Basket strainers shall be installed in accordance with City Standard Plan No. 505A.

800-2.6 Flow Sensor.

1. An irrigation main-line flow sensor shall be installed in accord with Drawings and manufacturer's installation instructions. See Drawings for location. Contractor shall be responsible for the installation, hook-ups, materials, components, connections, etc., of the flow sensors for the complete automatic operation of the system.
2. The flow sensor shall be manufactured by Data Industrial. Install flow sensor as recommended by the manufacturer and as detailed on the drawings. Use FM series plastic tee mounted flow sensor for sizes 1" through 4" as noted on the drawings.
3. The flow sensor wire from flow meter to automatic controller shall be one (1) black and one (1) red standard U.F. #14 AWG irrigation control wire.
4. Flow sensor wire may be extended to a maximum distance of 2000 ft. from the location of the assembly to which it is connected. Wire shall be installed in a 1-1/2 in. UL-listed Schedule 40 conduit gray in color.
5. Provide a separate flow sensor wire from flow sensor to its respective designated controller as detailed on the drawings. Run flow sensor wires within 1-1/2" PVC Schedule 40 conduit.
6. Control and common wires for the master valve immediately upstream from flow sensor shall be installed within flow sensor conduit along with flow sensor wire.
7. Flow sensor wires from different points of connection may not be installed within the same conduit.
8. Control and common wires for the automatic master valve immediately upstream from flow sensor shall be installed with wire colors other than red and black.
9. All splices shall be performed in a 3M "DBY" direct bury splice kit. Make only one splice with each connector.

Flow Sensor Wire Conduit:

1. As a part of this Contract, the Contractor shall provide and install a flow sensor cable and flow sensor cable conduit as shown on the drawings. Flow sensor cable conduit shall be PVC Schedule 40 with solvent welded joints and unless otherwise noted on the Drawings, shall be 1-1/2" in size, with 1/4" nylon pull rope

installed within entire length of conduit. Flow sensor cable conduit shall be gray in color.

2. Except as noted in paragraph number two (above) of this section, all requirements for flow sensor cable conduit and fittings shall be the same as for solvent-weld pressure main line pipe and fittings as set forth in Section 800-2.1.3 of these Specifications.
3. Sweep ells shall be fabricated standard electrical type PVC schedule 40 long sweep elbows. Cap sweep ell with tri-p lug with the ring for securing nylon pull rope.
4. The flow sensor cable conduit shall be installed where indicated on the Drawings and shall be routed, wherever possible, with the irrigation pressure main line piping. Provide 24" minimum cover over all flow sensor cable conduits. Provide 6" minimum separation between communication cable conduit and irrigation pressure main line piping.
5. Pull boxes shall be located a minimum of two hundred (200) feet on center, at each automatic controller location, and at each change of direction. Use 11- 3/4" x 17" x11" rectangular boxforall pull boxes, Carson Industries #1419- 12B with green bolt-down cover or approved equal. Cover shall be marked "Irrigation Control Cable." Refer to the Drawings for additional information.

800-2.7 In-line Drip Irrigation System.

1. Drip tubing shall be of nominal sized one-half inch low density, ultra-violet resistant, linear polyethylene tubing with internal pressure-compensating, self-cleaning, integral drippers at a specified interval. The tubing shall be brown in color for recycled water systems and shall conform to an outside diameter (0.0.) of 0.66" and an inside (I.D.) diameter of 0.57". The low volume tubing shall be capable of a discharge rate of 0.90 gallons per hour (GPH) between operating pressures of 7 to 70 psi for each individual dripper. Dripper tubing shall be manufactured by Salco or approved equal.

2. The individual self-cleaning, pressure-compensating drippers shall be welded to the inside of the tubing wall. The drippers are constructed of three individual pieces:
   a Black-colored dripper containing a filtration system on the inlet side, compensation cell, and recessed chamber with a water outlet.
   b Hard plastic diaphragm retainer (colored red (0.61) or black (0.92) depending on the discharge rate), with chamfered edges and a recessed groove in the center the full length of the diaphragm.
   c Flexible black rubber diaphragm that allows excessive pressure to build up within the chamber to purge sediment or other debris that may not have been captured by the disc filter.

3. Dripper spacing shall be 12" on center.

4. All insert barbed fittings shall be constructed of molded, ultra-violet-resistant, brown colored plastic with purple stripe for recycled water having a nominal inside dimension (I .D.) of 0.57" (17 mm). Each fitting shall have a minimum of two ridges or barbs per outlet. All fittings shall be Salco or approved equal and shall be available in one of the following end configuration:
   a. Barbed insert fittings. b. male pipe threads (MPT) with barbed insert fittings or female pipe threads (FPT) with barbed insert fittings.

5. Non-pressure supply and exhaust headers shall be rigid, un-plasticized polyvinyl chloride PVC Schedule 40 with schedule 40 PVC fittings conforming to Section 212-2.13 of these specifications. Size as noted on drawing.

6. The line flushing valve shall be constructed of brown molded plastic and shall be a normally open hydraulic valve which flushes based on volumetric quantities of water. Inlet and outlet configurations shall be 1/2" MPT.

7. The line flushing valve shall be serviceable by removing a threaded cover from a base, exposing the internal components. The internal components of the line flushing valve shall consist of a molded diaphragm retainer, a high density plastic flush regulator, and a diaphragm 2" in diameter. The line flushing valve shall be capable of automatically operating during initial system pressure build-up to discharge approximately one gallon of water per 15 gpm demand at 50 psi maximum, or 1.5 psi minimum inlet pressure as manufactured by Salco or approved equal.

8. Pressure regulation valve shall be a spring-operated piston type with an externally accessible regulation unit that can be serviced without removing the valve from the system. The valve shall be constructed from molded black plastic with six different colored tops with interchangeable springs denoting different pressure regulation and flow ranges. The regulator shall have a built-in indicator that shows when the proper outlet pressure is reached. Operating ranges for the valves shall be from 15 to 50 psi in 5 psi increments. Inlet and outlet ports of the valve shall be a combination of male/female threads as manufactured by Salco or approved equal.

9. Basket filter shall be Rain Bird PRB-QKCHK-100 pressure regulating basket filter with 200 mesh screen.

10. Air/vacuum relief valves shall be constructed of gray plastic with an internal sliding poppet valve that is capable of venting air or vacuum to the atmosphere only. The main body shall have a 1/2" male pipe thread (MPT). Operating pressure range for the air/vacuum relief valve shall be 7 psi minimum to 140 psi maximum as manufactured by Salco or approved equal.

11. Tubing clamps shall be constructed to 304 AISI stainless steel and shall be one "ear" type. This "ear" shall be capable of being pinched with a pinching tool to secure the tubing around the insert barbed fitting. Interior clamp wall shall be smooth to prevent crimping or pinching of tubing. Wall thickness of clamps shall be .0236" (0.6 mm) with an overall band width of 1/4" (7 mm).

800-2.8 Fertilizer Injection System.

The fertilizer injection shall be an EZ-FLO Fertilizing System or approved equal. It shall be a pressurized, non-mechanical system that operates exclusively on the differential pressure created by water flowing past inlet and outlet ports to the system storage tank. It shall require no moving parts to create fertilizer flow from the tank to the irrigation line. Even metering shall be accomplished by creating a layering process inside the tank which separates incoming water from the fertilizer solution without requiring an internal

bladder. Water entering the tank shall be directed to both the top of the tank and bottom of the tank to provide even metering and adequate agitation to accommodate the use of either liquid or water soluble non-hazardous fertilizers and supplements. The system shall be connected with flexible tubing and provide for easy disconnection and reconnection for subsequent removal and refill.

The proportioning rates shall be adjustable from 400:1 to 15,000:1 and automatically adjust to changes in water pressure and water flow without the use of electronic meters and/or control valves.

The system shall be constructed of materials conforming to a minimum of schedule 40 PVC.

800-2.9 Materials List.

Complete materials list that shall include the manufacturer, model number and description of all materials and equipment to be used and shall use the following format *(double-space between each item)*.

Item No.	Description	Manufacturer	Model
	Pressure Supply Line	Lasco	Schedule 40
	Turf Head	Rain Bird	1800
	Etc.	Etc.	Etc.

Notarized certificates from plastic pipe and fittings manufacturer indicating that material complies with the Specifications.

800-2.10 Irrigation Sleeves.

Irrigation sleeves shall be Schedule 40 PVC pipe and shall be two (2) times the diameter of the pipe or wire bundle within. Irrigation sleeves shall be furnished and installed in accordance with City Standard Plan No. 505.

800-3 ELECTRICAL MATERIALS.

800-3.2.1 Conduit. *DELETE in its entirety.*

800-3.2.2 Conductors. *DELETE in its entirety and SUBSTITUTE with the following:*

Low voltage control wires shall have a single solid copper conductor with colored PVC coating. The pilot control wires shall be color coded a specific color per controller and the common wires color coded white with a strip matching the color of the pilot wires.

The electrical system shall be installed in accordance with the National Electrical Code most recently adopted by the City. Connections between the automatic controllers and the electric control valves shall be made with direct burial copper wire AWG-U.F. 600 volt. Pilot wires shall be a different color wire for each automatic controller. Common wires shall be white with a different color stripe for each automatic controller. Install in accordance with valve manufacture's specifications and wire chart. In no case shall wire size be less than #14.

Connections shall be Scotchlok 3M DBY Direct Bury Splice Kit per City if Irvine Standard Plan 516. Kit shall include a Scotchlok Y Spring connector, a Polypropylene tube prefilled with waterproof sealing gel. Ground wires shall be white in color. Control wires shall be red (where two or more controllers are used, the control wires shall be a different color for each controller. These colors shall be noted on the "Record Drawings" Plans located on controller door). The Contractor shall provide 4 spare control wires per City Landscape Manual Section 5,B,24,C.

Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible. Install wires inside Schedule 40 Conduit anywhere it is not possible to place in pipe trench, or where wires must go under pavement. Conduit size shall be large enough to contain all necessary wires.

Where more than one (1) wire is placed in a trench, the wiring shall be taped together at intervals often feet (10').

An expansion curl should be provided within three feet (3') of each wire connection and at least every one hundred (1 00) feet of wire length on runs more than one hundred (1 00) feet in length and also at each change of direction. Expansion curls shall be formed by wrapping at least five (5) ruins of wire around a one-inch diameter pipe, then withdrawing the pipe.

All splices shall be made with Pen-Tite wire connector or approved equal. Use one splice per connector sealing pack.

Field splices between the automatic controller and electrical control valves will not be allowed without prior approval of the City.

800-3.3 Controller Unit. *DELETE in its entirety and SUBSTITUTE with the following:*

The type of controller unit shall be as shown on the Plans or listed within these Special Provisions. It shall be fully automatic, with provisions for manual operations, sized to accommodate the number of stations or control valves included in the system.

The existing irrigation controller shall be replaced with a Hydropoint WeatherTrak ET Pro3 controller. Retrofit work includes the disconnection of all communication and power lines from the existing controller and removal of the backboard assembly. The new controller with backboard assembly shall be furnished and installed in the existing stainless steel enclosure. All communication and power lines shall be reconnected to the new controller.

Contractor shall retrofit the following controllers:

Irrigation Controller Retrofit Table

Water Meter Conversion Areas			
Item	**Location**	**Model No.**	**Qty.**
1	A1 – Yale Ave, Controller #300	HP3-12/SP/HP3SP-5A/HP-FL2/GR-K	1
2	A6 – Michelson Dr, Controller #700	HP3-24/SP/HP3SP-5A/HP-FL2/GR-K	1
3	A7 – Rosa Drew Ln, Controller #736	HP3-24/SP/HP3SP-5A/HP-FL2/GR-K	1
4	A10 – Montanas Este, Controller #707	HP3-48/SP/HP3SP-5A/HP-FL2/GR-K	1
5	A12 – Deerfield Ave, Controller #325	HP3-18/SP/HP3SP-5A/HP-FL2/GR-K	1
6	B5 – Culver Dr & Ferris St, Controller #638	HP3-12/SP/HP3SP-5A/HP-FL2/GR-K	1

Median Landscaping Areas			
7	Barranca Pkwy.	HP3-18/SP/HP3SP-5A/HP-FL2/GR-K	1
8	Alton Pkwy	HP3-24/SP/HP3SP-5A/HP-FL2/GR-K	1
9	Main St.	HP3-24/SP/HP3SP-5A/HP-FL2/GR-K	1

Village: University Park			
	Controller No.	**Model No.**	**Qty.**
10	705, 710, 713, 714, 723, 725, 727, 728, 729, 731, 733, 741, 742, 750, 751, 752, 753, 760	HP3-12/SP/HP3SP-5A/HP-FL2/GR-K	18
11	702, 722, 740	HP3-18/SP/HP3SP-5A/HP-FL2/GR-K	3
12	708, 711, 712, 721, 726, 735, 736, 737, 743, 754, 755	HP3-24/SP/HP3SP-5A/HP-FL2/GR-K	11
13	759, 759 (2^{nd})	HP3-36/SP/HP3SP-5A/HP-FL2/GR-K	2
14	704. 716. 757. 758	HP3-42/SP/HP3SP-5A/HP-FL2/GR-K	4
15	701	HP3-48/SP/HP3SP-5A/HP-FL2/GR-K	1

Available from:
Company: Green Product Sales – Daryl Green
Address: 3146 Manistee Drive, Costa Mesa, CA, 92626
Business phone number: 1-949-584-7311
Mobile phone number: 1-949-584-7311
Email address: gps10@earthlink.net

The existing electrical meter pedestal and conduit to controller locations shall be protected in place.

Contractor shall check and test all irrigation components manually and automatically after new controller is installed to make sure all existing and any new valves are working optimally.

SECTION 801 – INSTALLATION

801-1 GENERAL.

801-2 EARTHWORK AND TOPSOIL PLACEMENT.

801-2.1 General.

801-2.2 Topsoil Preparation and Conditioning.

801-2.2.1 General. *DELETE 1st sentence in 4th paragraph, and ADD at end of section the following:*

Planting areas shall be free of all weeds stones, stumps, roots, or other debris 1 inch in diameter and greater.

WEED ABATEMENT OPERATIONS. The irrigation system, soil preparation operations, and finish grade shall be approved by the Engineer prior to weed abatement operations.

Contractor shall operate the irrigation system to keep planting areas uniformly moist for a period of two (2) weeks (14 calendar days). At the end of the two (2) week period,

Contractor shall spray all visible weeds with a specified, approved non-selective, post emergent herbicide per the Special Provisions. Application rate and method shall be recommended by the manufacturer. After spraying, planting areas shall remain unwatered for a minimum of forty-eight (48) hours.

After seven (7) calendar days from the chemical application, weeds and debris shall be disposed of off-site.

Contractor shall apply spray chemicals when air currents are still; preventing drifting onto adjoining property and preventing any toxic exposure to persons whether or not they are in or near the project.

After weed abatement operations, and as determined by the Engineer, planting areas shall be scarified to a depth not to exceed one inch (1").

Weeds and debris shall be disposed of off-site.

801-2.2.2 Fertilizing and Conditioning Procedures. *ADD the following:*

Soil amendments and fertilizer applications shall be verified by the City inspector prior to cultivating into the soil.

801-3 HEADER INSTALLATION. *DELETE in its entirety and SUBSTITUTE with the following:*

Concrete header shall be installed at the location and grades shown on the Plans and per City City Std Plan 600 prior to planting.

801-4 PLANTING.

801-4.1 General. *ADD the following:*

Perform actual planting only during those periods when weather and soil conditions are suitable and in accordance with locally accepted practice.

Confirm location and depth of underground utilities and obstructions. If underground structures or utility lines are encountered in the excavation of planting areas, other locations for planting shall be approved by the City Engineer.

All planting layout and staking shall be accurately made in accordance with the Plans. All trees shall be a minimum of 3 feet from City maintenance limit line.

Plant locations shall be approved by the City Inspector prior to excavation.

801-4.5 Tree and Shrub Planting. *ADD the following:*

Planting holes shall have irregular, non-glazed sides, and shall be a minimum of twice the diameter and onetime the depth of the original plant container.

Add the following to list in paragraph 5:

h) Two inches of approved mulch shall be applied to cover the entire planting site. However, do not put mulch within six inches of the tree or shrub trunk.

801-4.6 Plant Staking and Guying.

801-4.6.1 Method "A" Tree Staking. *DELETE in its entirety.*

801-4.6.2 Method "B" Tree Staking. *DELETE in its entirety and SUBSTITUTE with the following:*

The tree shall be staked with 2 Lodgepole Pine stakes 10 feet (3 m) long driven 24 inches (600 mm) into the ground. The stakes shall be 18 inches (450 mm) from each side of the tree trunk, and stakes and tree shall be in a plane parallel to the street centerline. Ties shall be Treestrap ® No. 12 BWB. Four ties shall be used; 2 at 2 inches (50 mm) from the top of each stake and 2 at 2 feet (0.6 m) above ground. Ties shall be loops secured to the stake on one end and shall be long enough to provide 3 inches (75 mm) of slack to permit the tree trunk limited movement in any direction.

801-4.6.3 Guying. *DELETE in its entirety.*

801-4.7 Ground Cover and Vine Planting. *ADD the following:*

Groundcover plants shall not be allowed to dry out before or while being planted. Roots shall not be exposed to the air except while actually being placed in the ground. Wilted plants will not be accepted.

Plant groundcover in straight rows evenly spaced, and at intervals required by the Plans. Use triangular spacing.

Plant each rooted plant with its proportionate amount of flat soil. Immediately water after planting until entire area is soaked to full depth of each hole.

Protect plants from damage and trampling at all times.

801-4.8 Lawn Planting. *DELETE in its entirety.*

801-4.9 Erosion Control Planting. *DELETE in its entirety.*

801-5 IRRIGATION SYSTEM INSTALLATION.

801-5.1 General. *ADD the following:*

Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that irrigation system may be installed in strict conformance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations. In the event of discrepancy, immediately notify the Engineer.

Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved. Before starting work, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade.

The Engineer will approve final grades before work on this Section will be allowed to begin. Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Coordinate the installation of all irrigation materials with all other work.

All scaled dimensions are approximate. Check and verify all size dimensions prior to proceeding with work under this Section. Exercise extreme care in excavating and working near existing utilities. Repair damages to utilities, which are caused by Contractor's operations or neglect, at no additional cost to City. Prior to installation, stake out all pressure supply lines, routing and location of sprinkler heads, valves, and automatic controller. Layout irrigation system and make minor adjustments required due to differences between site and Drawings. Where piping is shown on Drawings under paved areas, but running parallel and adjacent to planted areas, install the piping in the planted areas. Connections to, or the installation of, the water supply shall be at the locations shown on the Drawings. Minor changes caused by actual site conditions shall be made at no additional expense to the City.

Existing irrigation equipment to be replaced including valves, spray heads, controllers, and rotors shall be salvaged and delivered to the City.

Verify and be familiar with the locations, size and detail of points of connection provided as the source of water and connection to the irrigation system. Irrigation design is based on the available static water pressure shown on the Drawings. Verify static water pressure on the project prior to the start of construction. Should a discrepancy exist, notify the Engineer's authorized representative prior to beginning construction. Prior to

cutting into the soil, locate all cables, conduits, sewer septic tanks, and other utilities as are commonly encountered underground and take proper precautions not to damage or disturb such improvements. If a conflict exists between the obstacles and the proposed work, promptly notify the Engineer who will arrange for relocations. Proceed in the same manner if a rock layer or any other such conditions are encountered. Protect all existing utilities and features to remain on and adjacent to the project site during construction. Repair, at its sole cost, all damage resulting from its operations or negligence.

The Agency Representative shall have, at all times, safe access to the Work. Where the Specifications require work to be tested by the Contractor, it shall not be covered over until accepted by the Engineer. Notify the Engineer, a minimum of 48 hours in advance of where and when the work is ready for testing. Should any work be covered without testing or acceptance, it shall be, if so ordered, uncovered at the Contractor's sole expense. Inspections will be required for the following at minimum:

- System layout
- Pressure test irrigation main line (Six hours at 125 PSI) lateral lines (2 hours at 100 psi).
- Coverage test of irrigation system
- Final inspection prior to start of maintenance period
- Final acceptance

Work that fails testing and is not accepted will be re-tested. Hourly rates and expenses of the Engineer for re-inspection or re-testing will be paid by the Contractor at no additional expense to City.

Use all means necessary to protect irrigation system materials before, during, and after installation and to protect the installation work and materials of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the City. Exercise care in handling, loading, unloading, and storing plastic pipe and fittings under cover until ready to install. Transport plastic pipe only on a vehicle with a bed long enough to allow the pipe to lay flat to avoid undue bending and concentrated external load. Dispose of waste, trash, and debris in accordance with applicable law and ordinances and as prescribed by authorities having jurisdiction. Do not bury waste material and debris on the site. Burning of trash and debris will not be permitted. Remove and dispose of rubbish and debris generated by his work and workmen at frequent intervals or when ordered to do so by the Engineer. At the time of completion the entire site will be cleared of tools, equipment, rubbish and debris which shall be disposed of off-site in a disposal area that is fully and legally licensed.

Supply the following items:

- Two (2) wrenches for disassembly and adjustment of each type of sprinkler head used in the irrigation system.
- Two (2) 30-inch sprinkler keys for manual operation of control valves.
- One (1) valve box cover key.
- Four (4) extra sprinkler heads of each size and type.

The above equipment shall be turned over to the Engineer at the final inspection.

At the time of the pre-maintenance period inspection, the Engineer and governing agencies will inspect the work and, if not accepted, prepare a list of items to be completed by the Contractor. At the time of the post-maintenance period or final inspection the work will be re-inspected and final acceptance will be in writing by the Engineer. The City Engineer shall have final authority on all portions of the work.

Record Drawings. Show dimensioned location of all buried pipe and valves, and control pilot wires to valves and controllers. Take dimensions prior to backfilling trenches. All corrections on record drawings shall be done in red ink. Dimensions must be taken from above-ground, permanent, architectural objects. Do not dimension from plants or trees or sprinkler heads. Record drawings shall be reviewed prior to all progress payment approvals.

801-5.2 Trench Excavation and Backfill. *ADD the following:*

Mechanical trenching machines shall be of an approved type to cut trenches with straight sides. Pipes shall be supported continuously on the bottom of the trench and shall be laid to an even grade. Trenching excavation shall follow layout approved by the City Inspector and as indicated on the approved plans. Trenches shall be in accordance with City Standard Plan No. 500 and 501.

Where it is necessary to excavate adjacent to existing trees, the Contractor shall avoid injury to trees and roots. Excavation in areas where 2 inches and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be tunneled under and shall be heavily wrapped with burlap to prevent scarring or excessive drying. Where a ditching machine is run close to
trees having roots smaller than 2 inches in diameter, a wall of the trench adjacent to the tree shall be hand-trimmed, making clean cuts through roots. Roots 1 inch and larger in diameter shall be painted with two coats of Tree Seal or equal. Trenches adjacent to trees should be closed within 24 hours; where this is not possible, the side of the trench adjacent to the tree shall be
kept shaded with burlap or canvas**.**

801-5.3 Irrigation Pipeline Installation.

801-5.3.1 General. *ADD the following:*

Carefully inspect all pipes and fittings before installation, remove all dirt, scale, burrs and reaming. Install pipe with all markings facing up for visual inspection and verification.

Contractor shall install concrete thrust blocking using AWWA standards for location and installation criteria.

All lines shall have a minimum clearance of 4 inches from each other and from lines of other trades. Parallel lines shall not be installed directly over one another.

801-5.3.2 Steel Pipeline. *DELETE in its entirety.*

801-5.3.3 Plastic Pipeline. *ADD the following:*

Allow solvent welds at least 15 minutes set-up time before moving or handling and 24 hours curing time before backfilling.

360° applicators shall be used to apply primer and solvent on sizes 2½ inches and larger in diameter.

Center load all PVC pipe prior to pressure testing to resist displacement. All threaded PVC to PVC connections shall be assembled using Teflon tape or approved equal.

Threaded PVC female fittings shall not be used with brass or copper. Use a non-hardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.

801-5.4 Installation of Valves, Valve Boxes, and Special Equipment. *ADD the following:*

The Contractor shall follow Irvine Ranch Water District's requirements for "Retrofit of Potable Irrigation Systems to Recycled Water" notes and "General Irrigation Notes" on the Plans.

Air Relief Valve: Install at all high points in drip line tubing grid as shown and directed on drawings and installation details.

Flush Valves: Install in flush header or at ends of each drip line zone segment as shown and directed on drawings and installation details. Install at least 12-inches from and align with adjacent walls or edges of paved areas.

Fertilizer injection system shall be installed underground, in a valve box in the irrigation main line between the approved back flow preventer and the sprinkler valve manifold for the area or landscape being fertilized.

a. Turn off water to the irrigation main line and relieve pressure by opening a sprinkler valve.

b. Glue an EZ-FLO Coupling Connector or approved equal into the irrigation main line. Note flow direction indicator on the coupling connection and install accordingly.

c. Connect ¼" black polyethylene tubing to the Blue connector on the coupling and connect the Blue Jaco fitting to the coordinating side of the system cap.

d. Connect ¼" clear polyethylene tubing to the Green connector on the coupling and connect the Green Jaco fitting to the coordinating side of the system cap.

e. Install pressure clamps on the green and blued tubing connections on the EZ-FLO Coupling Connector.

f. Cut both the black and clear connecting lines approximately 3” from the cap connection and install EZ-FLO Shut Off Valves or approved equal with the disconnect washer located between the Shut Off Valve and the connection to the cap. (EZ-FLO “X” models have the shut off valves factory installed to tubing).

g. Set Shut Off Valves to the off position and turn the main line water on.

801-5.5. Sprinkler Head Installment and Adjustment.

801-5.5.1 General.

801-5.5.2 Location, Elevation, and Spacing. *DELETE in its entirety.*

801-5.5.3 Riser and Nozzle Line Installation. *DELETE in its entirety.*

801-5.5.4 Sprinkler Head Adjustment. *DELETE in its entirety.*

ADD:

801-5.5.5 Flow Sensor.

The pipe connected to the entrance of the flow sensor shall be a minimum of 30 inches long from nearest turn in system, with no other irrigation components or pipe connectors between the flow sensor and the nipple. The pipe connected to the end of the flow sensor shall be a minimum of 15 inches long from the nearest turn in system, with no other irrigation components or pipe connectors to maintain clearance in water flow. Flow sensor shall be furnished and installed in accordance with City Standard Plan No. 509.

801-5.5.6 Drip Irrigation Installment and Adjustment.

Keep pipe free from dirt and debris. Cut pipe ends square, deburr and clean as recommended by pipe manufacturer.

Keep ends of assembled pipe capped. Remove caps only when necessary to continue assembly.

PVC Pipe and Fittings:

1. Use only strap-type friction wrenches for threaded plastic pipe.
2. PVC Solvent Weld Pipe and Fittings:
    a. Use appropriate primer and solvent cement. Join pipe in manner recommended by pipe and fitting manufacturers and in accordance with accepted industry practices.
    b. Cure for thirty (30) minutes before handling and twenty-four (24) hours before pressurizing or installing with vibratory plow.
    c. Snake pipe from side to side within trench.
3. PVC Threaded Connections:
    a. Use only factory-formed threads. Field-cut threads are not permitted.
    b. Apply thread sealant in manner recommended by component, pipe and sealant manufacturers and in accordance with accepted industry practices.

Drip line Tubing and Fittings:

1. Use only manufacturer recommended fittings for drip line tubing connections or transitions as recommended by the Manufacturer's representative for the specific site and system conditions.
2. Drip line Insert Fittings:
    a. Install drip line tubing and fittings in manner recommended by manufacturer and in accordance with accepted industry practices.
3. Drip line Compression Fittings:
    a. Install drip line tubing and fittings in manner recommended by manufacturer and in accordance with accepted industry practices.

Lateral Piping and Drip line Tubing:

1. Install lateral piping and drip line tubing at locations and in grid patterns as indicated on drawings and installation details, and in strict accordance with manufacturer recommendations.
2. Thoroughly flush PVC lateral piping, supply headers, and drip line tubing immediately upon installation.

801-5.6 Automatic Control System Installation. *ADD the following:*

Prior to installation of the automatic control system, Contractor shall test existing irrigation system and provide a list of the locations, controller #s, and valve #s that are not operational prior to starting work.

Contractor shall retrofit the existing irrigation controllers by swapping out the entire backboard containing the existing controller and associated components with a WeatherTrak ET Pro 3 or LC pre-assembled onto a new backboard as shown on the plans. Contractor shall follow manufacturer recommendations in retrofit procedures and utilize the existing stainless steel enclosure. If the enclosure was damaged prior to installation or is too small and does not allow for retrofit, contractor shall contact the City Engineer immediately and wait for further instruction.

Once the new irrigation controller with backboard is secured into the existing enclosure, contractor shall reconnect all wires including, but not limited to: power, remote control valves, ground and communication.

Once the controller retrofit is complete and all communication and electrical wires are connected back to the new controller, Contractor shall perform an operational test to check and test all irrigation valves to insure manual and automatic operation.

801-5.7 Flushing and Testing.

801-5.7.2.2 Method A.

801-5.7.2.3 Method B. *DELETE in its entirety:*

801-5.7.3 Sprinkler Coverage Test. *ADD the following:*

Activate each drip line and emitter lateral control zone valve in sequence from controller. Provide either one additional person with radio or use handheld remote to activate remote control valves from controller. Manually activating remote control valve

using manual bleed mechanism at remote control valve is not an acceptable method of activation. Owner's Representative will visually observe operation, water application patterns, and leakage.

Replace or adjust defective valve, fitting, drip line segment, emitter lateral segment, or appurtenance to correct operational and coverage uniformity deficiencies.

Repeat test(s) until each drip line or emitter lateral test segment passes testing procedures. Repeat tests, replace components, and correct deficiencies at no additional cost to Owner and/or Owner's Representative.

801-5.7.4 Operational Test. *ADD the following:*

Furnish all materials and perform all work required to correct any inadequacies of coverage due to deviations from the plans, or where the system has been willfully installed as indicated on the plans when it is obviously inadequate, without bringing this to the attention of the Engineer. This test shall be accepted by the Engineer and accomplished before starting any planting. Final inspection will not commence without record drawings as prepared by the Contractor. During the maintenance period adjust and maintain the irrigation system in a fully operational condition providing complete irrigation coverage to all intended plantings. Clean-up shall be made as each portion of the work progresses. Refuse and excess dirt shall be removed from this site, all walks and paving shall be broomed, and any Contractor damage shall be repaired to original conditions.

ADD:

801-5.7.5 Fertilizing System Installation and Operation.

1. Location
    a. The system shall be installed underground, in a valve box in the irrigation main line between the irrigation point of connection and the irrigation control valves for the area or landscape being fertilized and as noted on the irrigation drawings.
2. Installation
    a. Turn off water to the irrigation main line and relieve pressure by opening a sprinkler valve.
    b. Glue and EZ-FLO Coupling Connector or approved equal into the irrigation main line. Note flow direction indicator on the coupling connection and install accordingly.
    c. Connect ¼" black polyethylene tubing to the Blue connector on the coupling and connect the Blue Jaco fitting to the coordinating side of the system cap.
    d. Connect ¼" clear polyethylene tubing to the Green connector on the coupling and connect the Green Jaco fitting to the coordination side of the system cap.
    e. Install pressure clamps on the green and blued tubing connections on the EZ-FLO Coupling Connector.
    f. Cut both the black and clear connecting lines approximately 3" from the cap connection and install EZ-FLO Shut off Valves or approved equal with the disconnect washer located between the Shut Off Valve and the

connection to the cap. (EZ_FLO "X" models have the shut off valves factory installed to tubing).

g. Set Shut Off Valves to the off position and turn the main line water on.

3. Operation
    a. Remove the cap by disconnecting at the shut off valves by pulling the washer against the shut off valve while pulling tubing away from Cap of system.
    b. Fill the tank with 3" to 4" of water with either shut off valve.
    c. Fill the system with the recommended amount of EZ-FLOW Non Hazardous Premium Fertilizer and Liquid Nutrition Supplement or approved equal directly in the tank.
    d. Fill the tank the rest of the way with water by opening one of the Shut Off Valves and direct the flow into the tank until all air has been exhausted.
    e. Screw the cap to the tank and reconnect the tubing. (be sure to install washer first).
    f. Slowly turn both Shut Off Valves to the on position.

4. Testing
    a. Open one or more sprinkler valves.
    b. Set the system on fast and watch for color in the clear tubing. If color is present, the system is ready for operation.
    c. Set the feed adjustment valve to the desired feed rate.

801-6 MAINTENANCE AND PLANT ESTABLISHMENT. *ADD the following after the first paragraph:*

The entire project shall be satisfactorily maintained, commencing from the time that all items of work have been completed as specified in the foregoing articles of these Special Provisions and to the satisfaction of the Engineer, and continuing through the plant establishment period and the landscape maintenance period until final acceptance of the project.

Project maintenance work shall consist of applying water, weeding, caring for plants, mowing, edging, sweeping walks, litter pickup, and performing all general project maintenance.

Pre-Maintenance Inspection Period
The Contractor shall request in writing a pre-maintenance period inspection upon compliance with the following conditions:

1. All work required in the approved plans and specifications including all hardscape, irrigation, planting, hydroseeding, and sodding shall be completed.
2. All punch list and correction list items shall be completed.
3. Permanent power to automatic controllers shall be continuous and established.
4. Permanent water supply shall be continuous and established.
5. The following shall be submitted and approved by the City Inspector:
    a. One (1) Mylar set of record drawings.
    b. Landscape Architects Certificate of Compliance.
    c. Digital Raster files on CD ROM of the record drawings in TIFF, CCITT, Group 4 file format either an AutoCAD drawing file (.DWG) format, a data exchange file (.DXF) format, or an ARC/INFO export file (.E00) format.

(City maintained areas only.)

The City Inspector, Contractor, and City's Landscape Maintenance representative shall be present during the inspection.

Written approval by the City Inspector shall be obtained prior to the beginning of the maintenance period.

Maintenance Period Inspection

The entire project shall be inspected weekly during the maintenance period. The irrigation coverage and timing shall be checked and adjusted, if necessary.

Thirty days prior to the end of the maintenance period the contractor shall request an inspection. At this time, all irrigation systems shall be adjusted in accordance with the Irvine Ranch Water District's guidelines.

At this time, the Contractor shall submit the following:

a. Two (2) controller charts for each controller. Controller charts shall be a Blackline print of the reduced record drawing, hermetically sealed between two 20-mil-thick plastic sheets. The chart shall be the maximum size that the controller door will allow and shall show the areas covered by the controller. A different color shall be used to show the area of coverage for each valve. If the controller sequence is not legible when the drawing is reduced, it shall be enlarged to a readable size.
b. Two (2) copies of completed "Controller Data Sheet" for each controller hermetically sealed between two (2) 10 mil thick plastic sheets.
c. One (1) individually hardbound copy of the operation and maintenance manuals. The manuals shall describe the material installed. Each complete manual shall include the following information:
    1) Index sheet stating Contractor's address and telephone number, list of equipment including names and addresses of local manufacturer representatives.
    2) Complete operating and maintenance instruction for all equipment.
    3) Spare parts and related manufacturer information for all equipment.
    4) Contractor's performance bond information, including bonding company, bond number, agent and phone number.
    5) Listing of all required warranties and guarantees with effective dates and expiration date.
    6) Equipment: Supply as part of the contract the following items:
        i. Two (2) keys for controller.
        ii. Two (2) quick couplers with hose swivels.

ADD the following after the last paragraph:

The Contractor shall notify the City Representative, ten (10) days prior to completion of the maintenance period. Deficiencies noted during inspection shall extend the maintenance period until noted deficiencies are corrected.

All filters and irrigation heads shall be cleaned. Valve boxes and sprinklers shall be adjusted to heights required in relation to finish grade.

End of maintenance shall occur only upon written acceptance by the City. City maintained areas will be accepted only on the first (1st) and fifteenth (15th) of the month.

Partial acceptance of improvements within the scope of work of approved plans shall not be authorized without approval by the City Engineer.

ADD:

801-6.1 Landscape Maintenance and Plant Establishment Period. The landscape maintenance and plant establishment period shall be a minimum of ninety (90) working days, commencing upon written authorization from the Engineer. This period shall not start until all construction work is complete and approved by the Engineer.

801-7 MEASUREMENT.

801-8 PAYMENT. *DELETE by its entirety and SUBSTITUTE with the following:*

Payment for **Clearing and Grubbing** shall be made at the contract **lump sum (LS)** price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, including but not limited to dust control, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Soil Preparation and Fine Grading** shall be made at the contract unit price per **square foot (SF)** and will be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved, complete in place, conforming to the requirements herein, including but not limited to, commercial and organic fertilizers, applying herbicides, applying pre-emergent, irrigation, supervision and all other items necessary within the limits as shown on the Plans, and no additional compensation will be allowed therefor.

Payment for **Organic Soil Amendment** shall be made at the contract unit price per **cubic foot (CF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Wood Mulch – 2" Depth** shall be made at the contract unit price per **cubic yard (CY)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **24" Box Trees** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in

place, including but not limited to, tree stakes, root barrier, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **1-Gallon Plant** and **5-Gallon Plant** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Replacement Planting** shall be made at the contract unit price per **square foot (SF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, for existing, disturbed landscape areas and irrigation component removal areas as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Concrete Header** shall be made at the contract unit price per **linear foot (LF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Irrigation System** shall be made at the contract **Lump Sum (LS)** price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, including but not limited to, pipe and fittings, irrigation pipes, sprinkler equipment, drip pipe and fittings, air relief valves, flush valves, irrigation heads, bubbler in tree wells, flushing and testing, pipeline pressure test, sprinkler coverage test, operational test, recycled labels, tags, and signs, disconnect and salvage existing potable water meter and install new reclaimed water meter and maintain existing irrigation facilities as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Remove Existing Backflow Preventer** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in removing complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Reduced Pressure Principle Backflow Assembly** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed

by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Gate Valve** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Remote Control Valve** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Quick Coupling Valve** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Master Valve with Pressure Regulator Valve** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Basket (and Wye) Strainer** shall be made at the contract unit per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Pressure Reducing Valve** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Flow Sensor** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Fertilizer Injection System** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Control Wires and Conductors** shall be made at the contract unit price per **linear foot (LF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Controller Unit** shall be made at the contract unit price per **each (EA)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, including but not limited to, the disconnection and removal of existing irrigation controller, check and test irrigation system, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Irrigation Sleeve** shall be made at the contract unit price per **linear foot (LF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Directional Boring** shall be made at the contract unit price per **linear foot (LF)** and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Trench Repair per City Std Plan 223** shall be made at the contract unit price per **square foot (SF)** price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Trench and Backfill** shall be made at the contract **linear foot (LF)** price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **(30) Thirty Day Plant Establishment Period** shall be made at the contract lump sum price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

APPENDIX A

STANDARD PLANS

Copies of the following agency standard plans and/or details referenced by the plans and Specifications are attached hereto and are made a part of these Special Provisions. See Appendix.

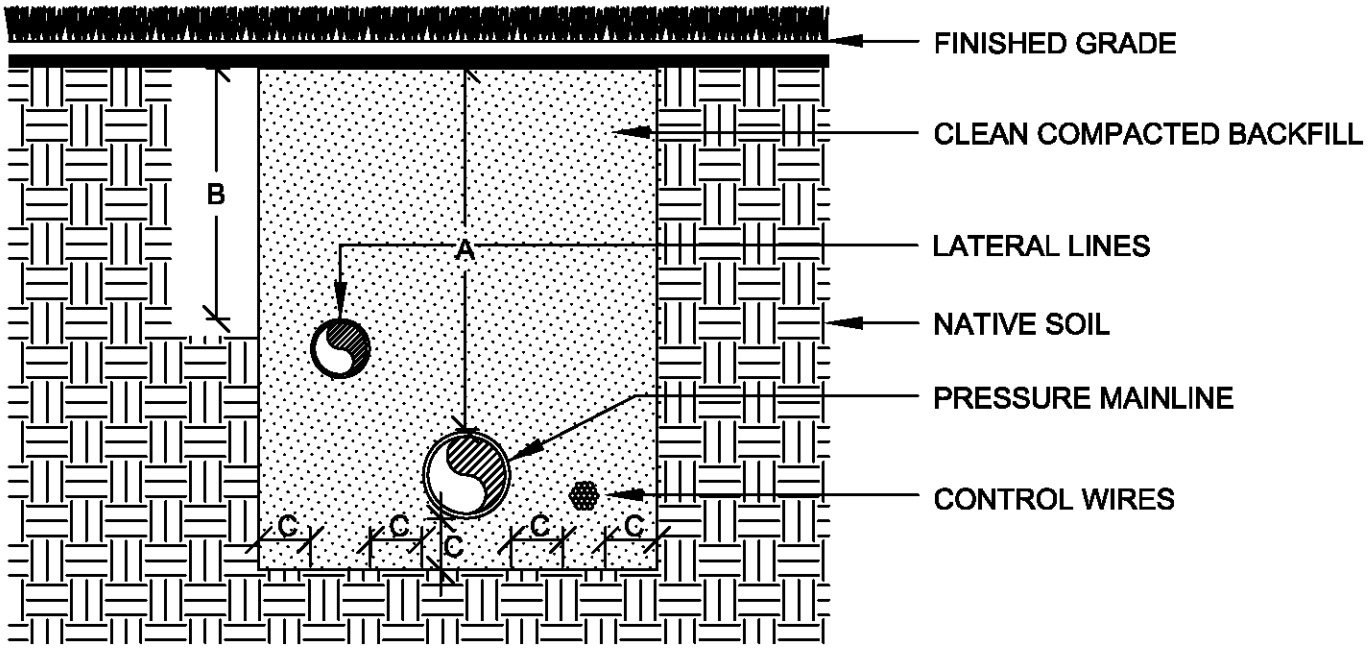
AGENCY:	STD. PLAN NO.:	DESCRIPTION:
City of Irvine	500	PIPE AND WIRE TRENCHING
City of Irvine	501	SLEEVE TRENCHING
City of Irvine	505	STRAINER/PRESSURE REDUCING VALVE
City of Irvine	506	GATE VALVE 2 INCHES AND SMALLER
City of Irvine	507	GATE VALVE 2 ½ INCHES AND LARGER
City of Irvine	508	QUICK COUPLER VALVE IN BOX
City of Irvine	509	FLOW SENSOR
City of Irvine	510	ANGLE REMOTE CONTROL VALVE
City of Irvine	519	TREE BUBBLER
City of Irvine	601	SHRUB PLANTING
City of Irvine	606	DOUBLE STAKE TREE, 15 GAL AND 24 INCH BOX
City of Irvine	608	ROOT BARRIER
City of Irvine	609	GROUND COVER PLANTING

Copies of the following agency standard plans and/or details referenced by the plans and Specifications are attached hereto and are made a part of these Special Provisions. See Appendix.

AGENCY:	STD. PLAN NO.:	DESCRIPTION:
City of Irvine	500	PIPE AND WIRE TRENCHING
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City of Irvine	509	FLOW SENSOR
City of Irvine	510	ANGLE REMOTE CONTROL VALVE
City of Irvine	519	TREE BUBBLER
City of Irvine	601	SHRUB PLANTING
City of Irvine	606	DOUBLE STAKE TREE, 15 GAL AND 24 INCH BOX
City of Irvine	608	ROOT BARRIER
City of Irvine	609	GROUND COVER PLANTING

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City of Irvine	601	SHRUB PLANTING
City of Irvine	606	DOUBLE STAKE TREE, 15 GAL AND 24 INCH BOX
City of Irvine	609	GROUND COVER PLANTING



DIMENSION	A	B	C
1/2" TO 2 1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"		4"

SECTION VIEW - N.T.S.

NOTE:

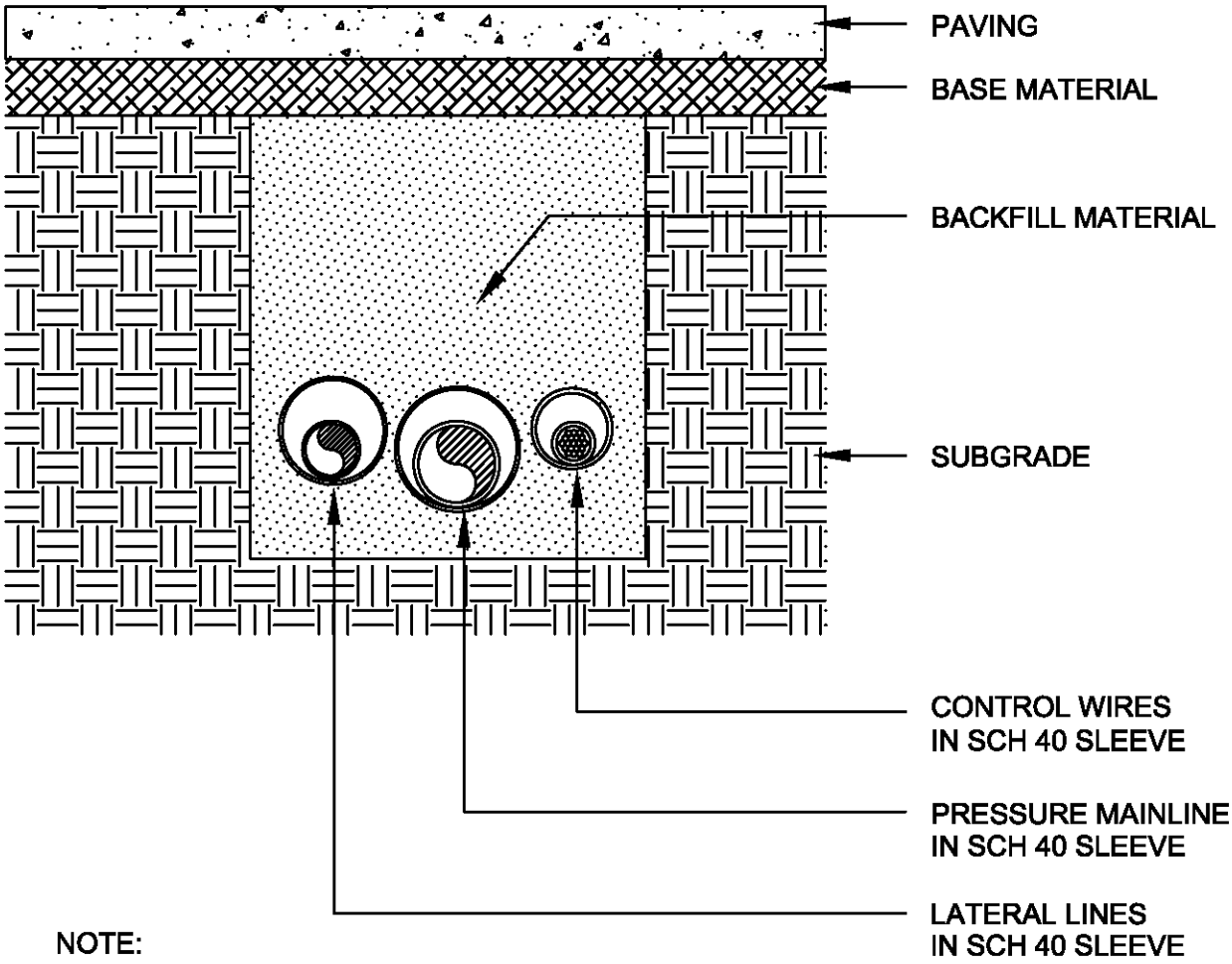
ALL PLASTIC PIPING SHALL BE SNAKED WITHIN TRENCH.

BUNDLE WIRING AND WRAP WITH TAPE AT TEN FOOT INTERVALS.

ALL MAINLINE PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	PIPE AND WIRE TRENCHING	500
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1



NOTE:

ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

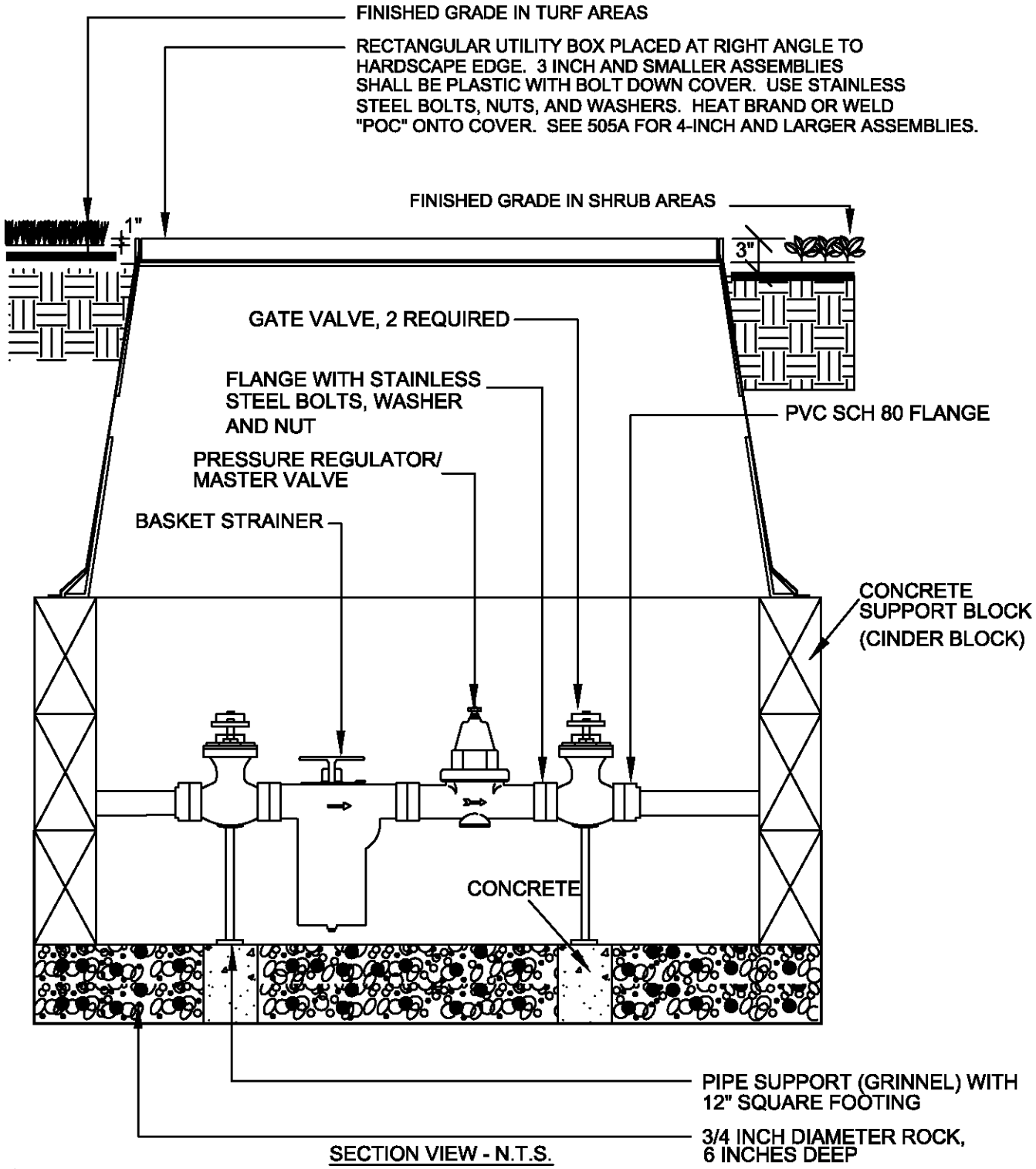
ALL MAINLINE, LATERAL LINES, AND CONTROL WIRES SHALL BE SLEEVED BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC, 2 TIMES THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.

DEPTH OF SLEEVES, BACKFILL, AND COMPACTION OF TRENCH SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 223 FOR CROSSINGS OF STREETS AND SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 500 FOR CROSSINGS OF PARKING LOTS, SIDEWALKS, OR OTHER HARDSCAPE ELEMENTS.

HORIZONTAL DIMENSION BETWEEN SLEEVES SHALL BE A MINIMUM OF 4 INCHES.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SLEEVE TRENCHING	**501**
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

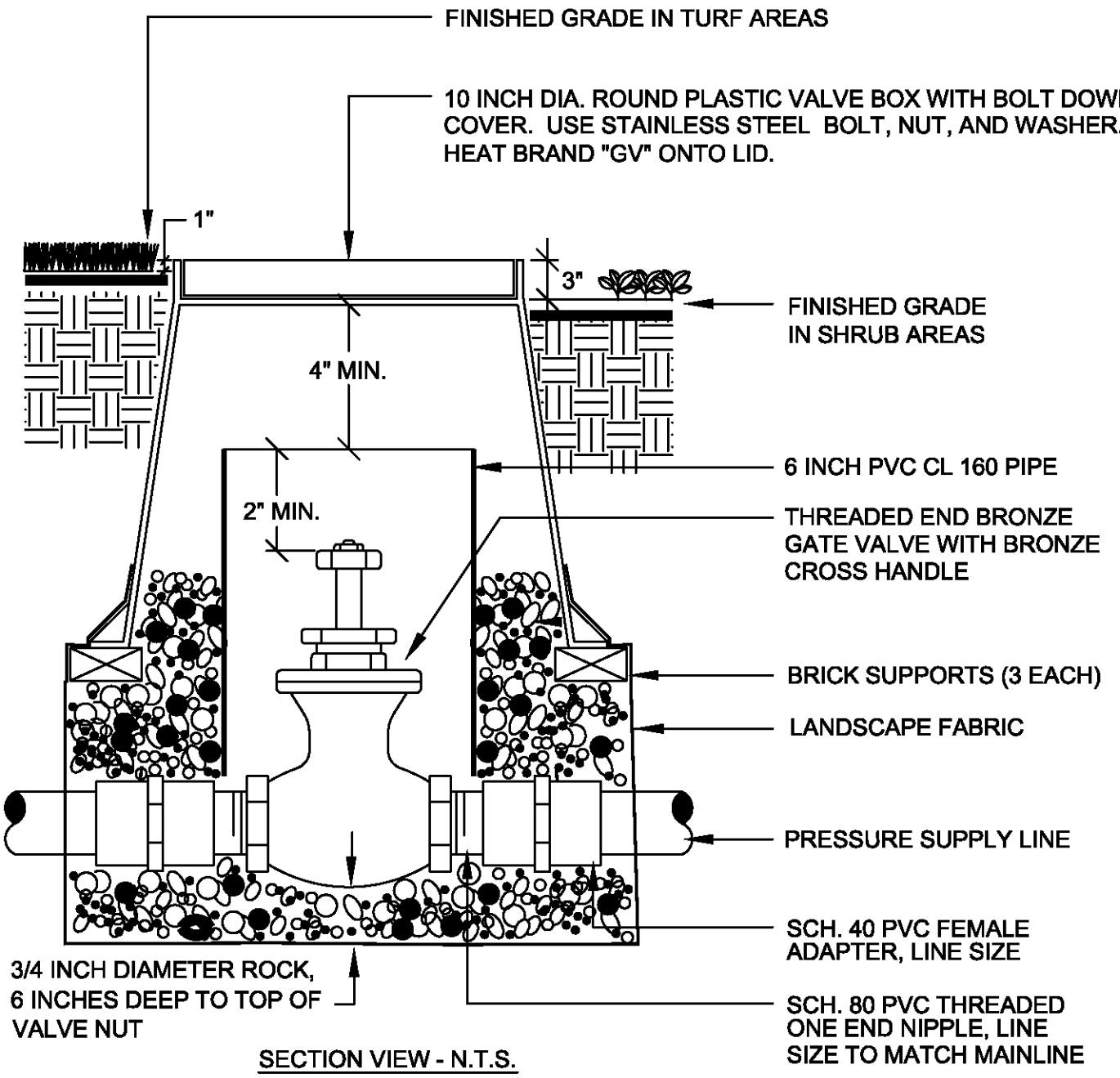


SECTION VIEW - N.T.S.

NOTE:
WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	STRAINER / PRESSURE REDUCING VALVE	**505**
	3" AND SMALLER ASSEMBLY	
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer — Date: 6-22-09	Sheet 1 of 1



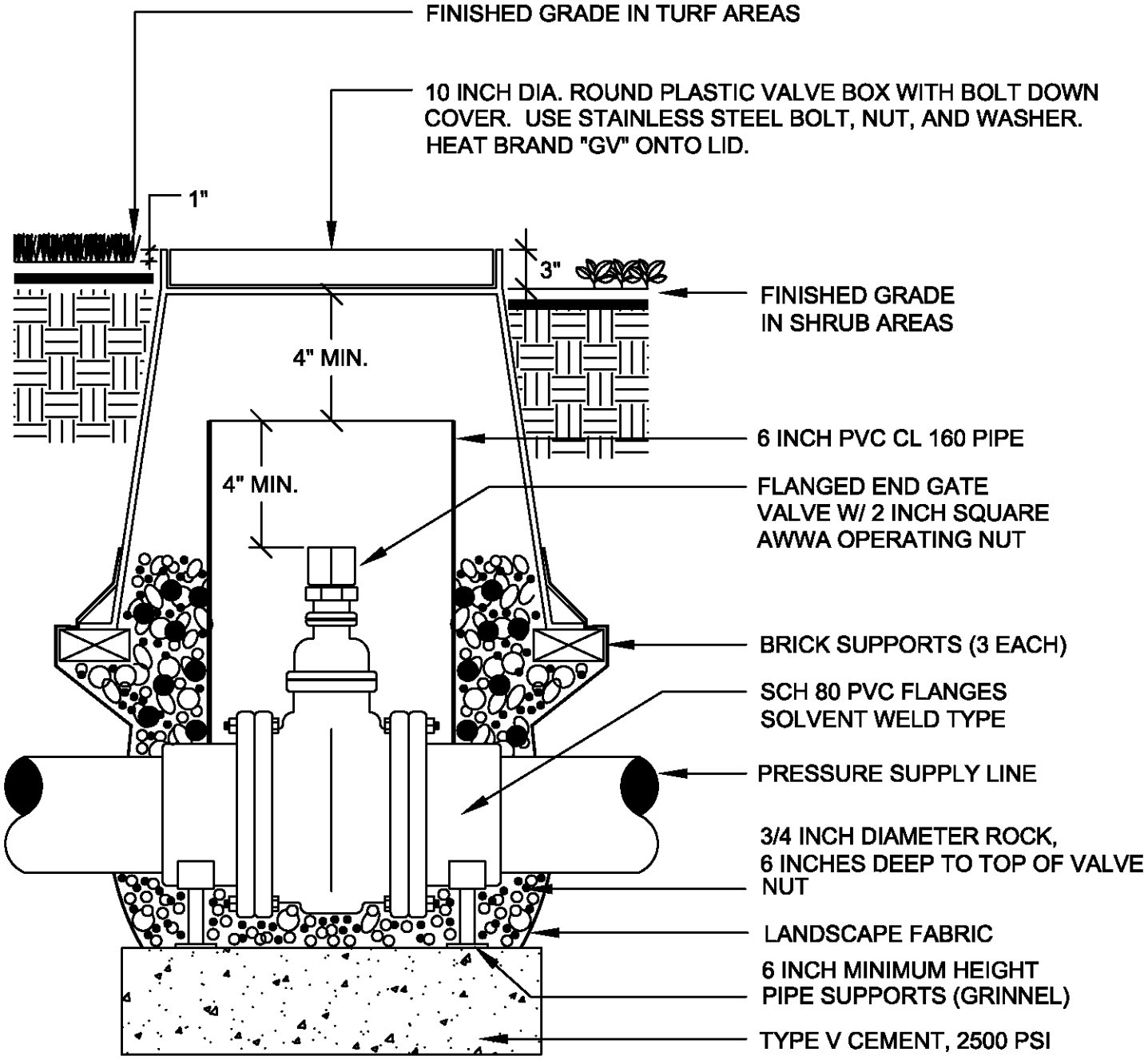
SECTION VIEW - N.T.S.

NOTE:
INSTALL VALVE BOX AND PIPE EXTENSION AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GATE VALVE 2 INCHES & SMALLER	506
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1



SECTION VIEW - N.T.S.

NOTE:

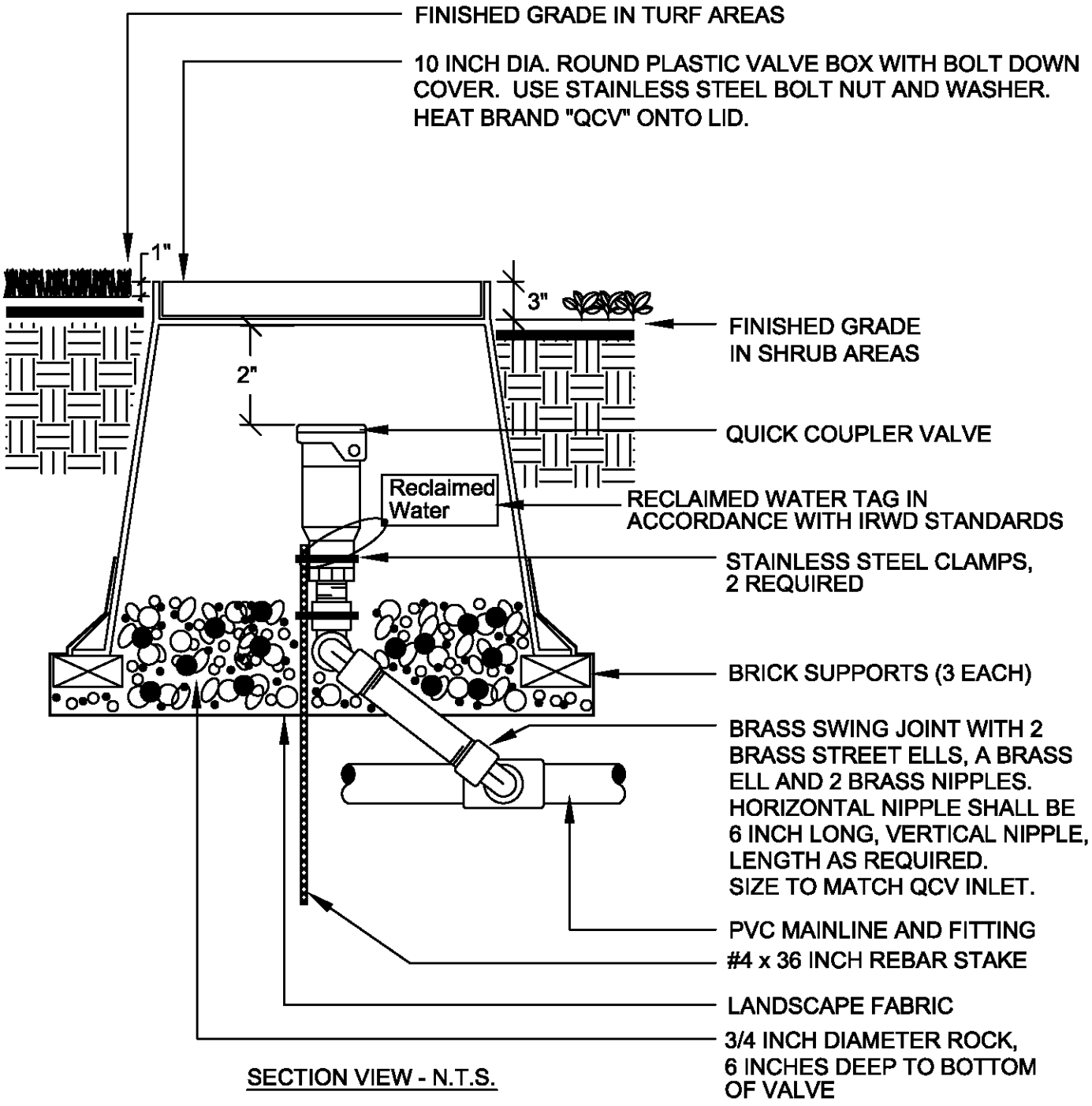
CONTRACTOR TO PROVIDE ONE 5 FOOT LONG TEE WRENCH WITH SQUARE NUT ADAPTER FOR THE OPERATION OF GATE VALVES.

INSTALL VALVE BOX AND PIPE EXTENSION AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GATE VALVE 2 1/2 INCHES AND LARGER	**507**
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1



SECTION VIEW - N.T.S.

NOTE:

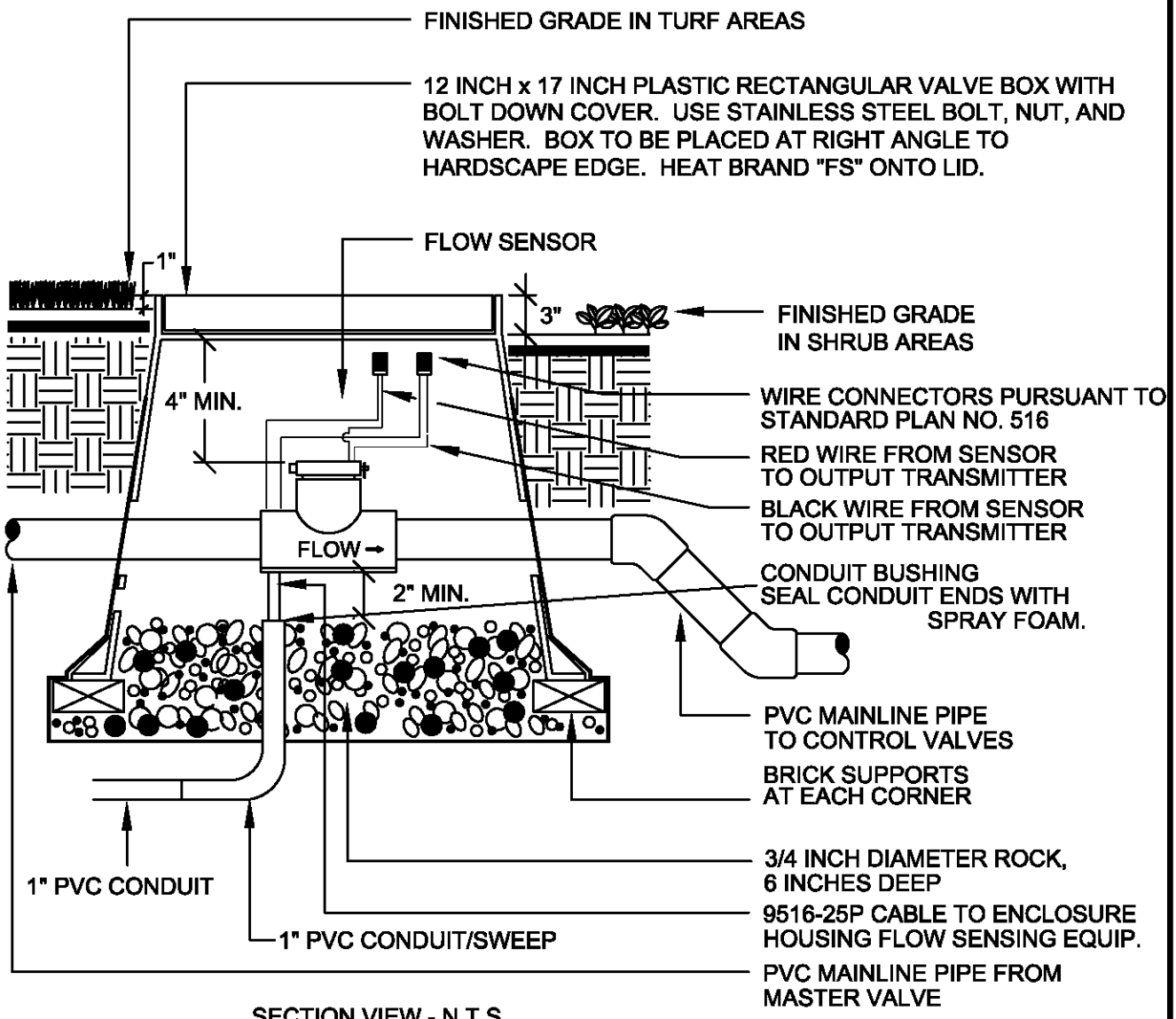
USE TEFLON TAPE ON ALL THREADED FITTINGS.

QUICK COUPLER KEY MUST CLEAR VALVE BOX.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	QUICK COUPLER VALVE IN BOX	508
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1



SECTION VIEW - N.T.S.

NOTE:

INSTALL FLOW SENSOR PURSUANT TO THE MANUFACTURER'S RECOMMENDATIONS AND WIRE TRANSMITTER TO THE IRRIGATION CONTROLLER.

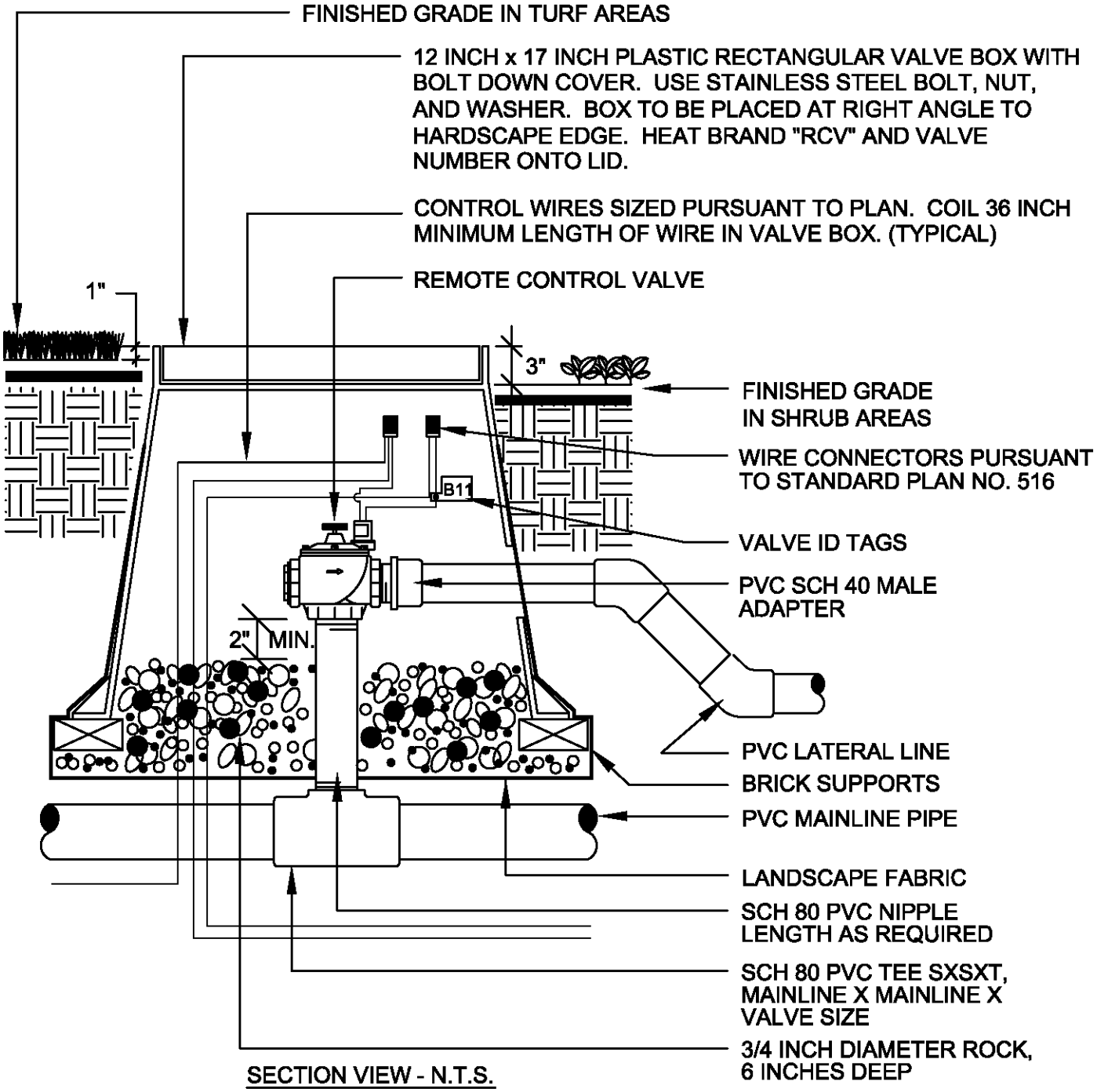
THE MAINLINE PIPE SHALL NOT CHANGE SIZE OR DIRECTION CLOSER THAN 5 FEET UPSTREAM OR 3 FEET DOWNSTREAM OF THE FLOW SENSOR.

USE 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH ON THE DOWNSTREAM SIDE OF THE FLOW SENSOR.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	FLOW SENSOR	**509**
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer Date 6-22-09	Sheet 1 of 1



SECTION VIEW - N.T.S.

NOTE:

INSTALL CONTROL VALVES A MINIMUM OF TWO FEET APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.

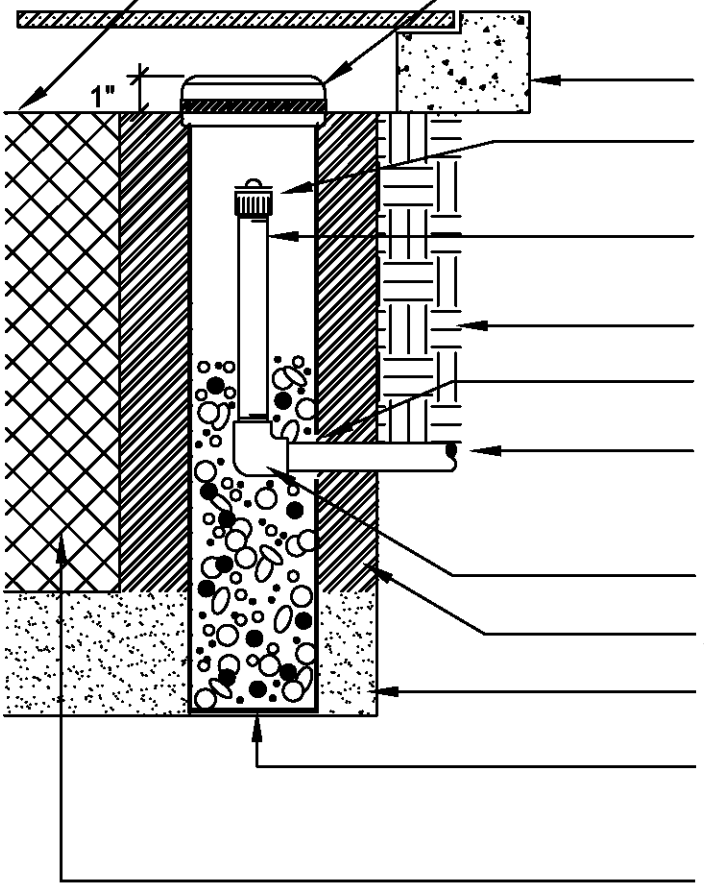
INSTALL CHRISTY'S MODEL #3800 RECLAIMED WATER IDENTIFICATION NAME PLATES TO THE LID OF EACH RECLAIMED WATER VALVE BOX.

USE TEFLON TAPE ON THREADED FITTINGS.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	ANGLE REMOTE CONTROL VALVE	510
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer — Date: 5-22-09	Sheet 1 of 1



FINISHED GRADE

RUBBER DRAIN CAP, 4 INCH DIAMETER. SECURE WITH STAINLESS STEEL HOSE CLAMP.

CONCRETE SIDEWALK AND TREE GRATE OPTIONAL

BUBBLER HEAD TOP 1 INCH BELOW FINISHED GRADE

SCH 80 NIPPLE, LENGTH AS REQUIRED

NATIVE SOIL

DRILL THROUGH 4 INCH DRAIN PIPE

PVC LATERAL LINE

1/2 INCH DIAMETER PVC ELL (SxT)

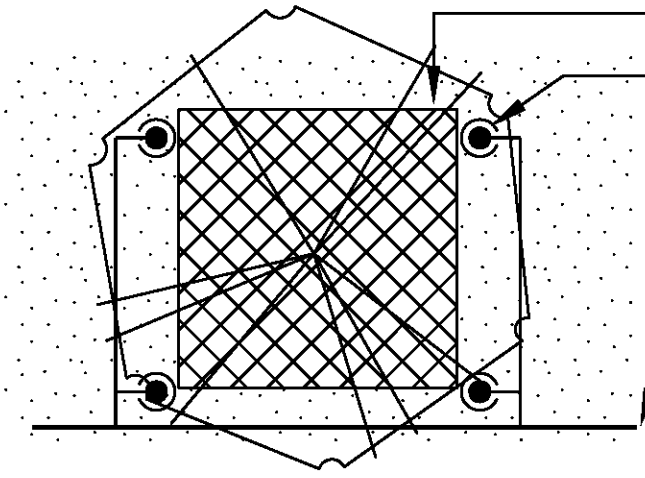
AMENDED NATIVE SOIL BACKFILL

UNAMENDED NATIVE SOIL BACKFILL

4 INCH DIA. x 36 INCHES LONG PERFORATED PVC DRAIN PIPE. FILL WITH 3/4 INCH DIAMETER GRAVEL TO BOTTOM.

ROOT BALL OF TREE

SECTION VIEW - N.T.S.



ROOT BALL OF TREE

BUBBLER HEADS AS SHOWN ABOVE

PVC LATERAL LINE PIPE

PLAN VIEW - N.T.S.

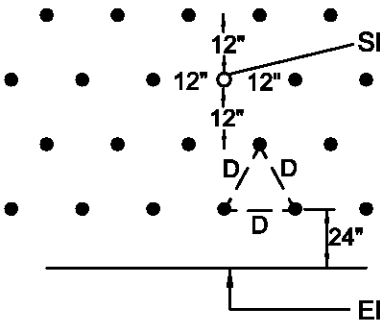
NOTES:

PROVIDE BUBBLER QUANTITIES AS INDICATED ON APPROVED PLANS.

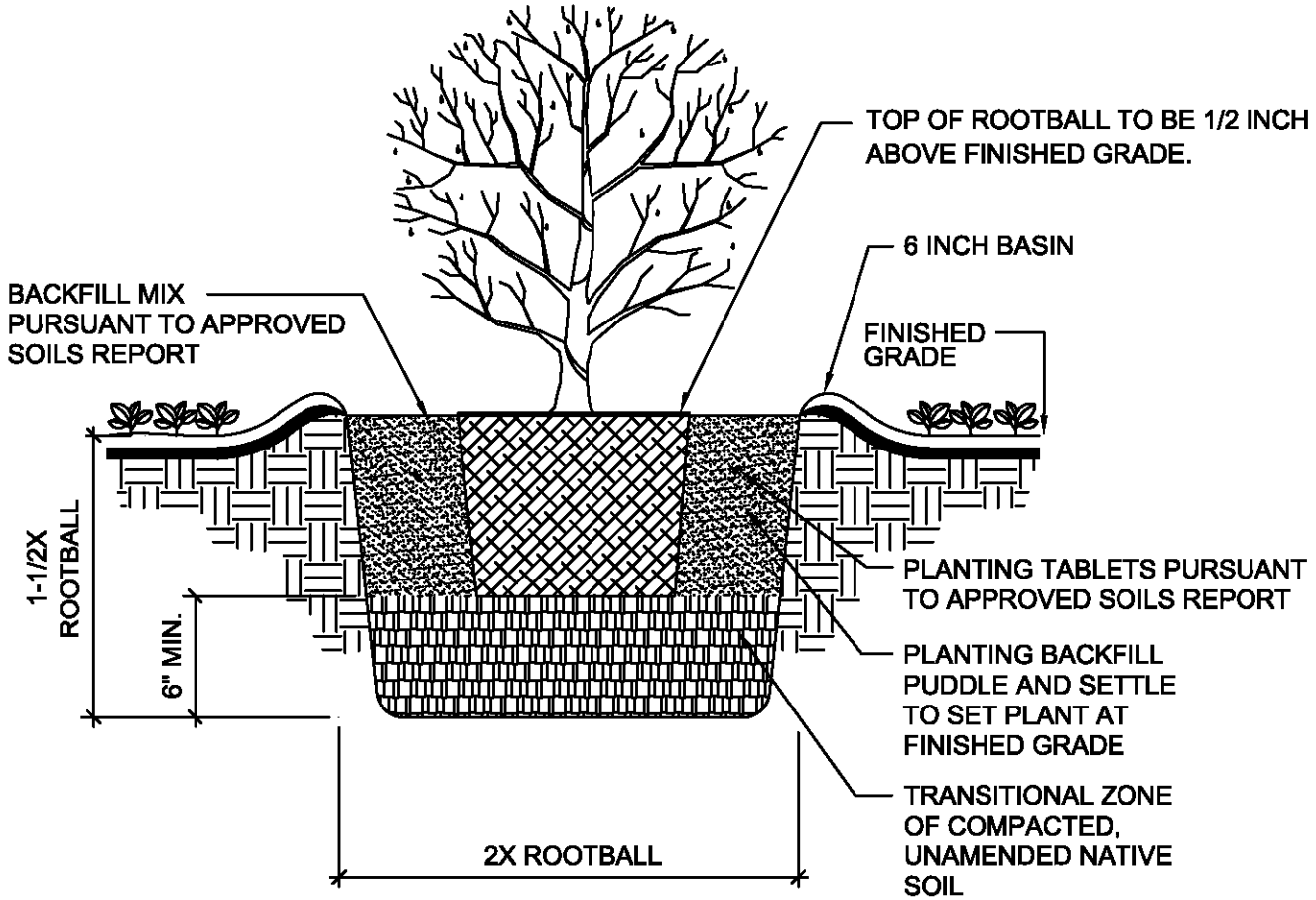
USE TEFLON TAPE ON ALL THREADED FITTINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	TREE BUBBLER	**519**
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer — Date: 6-22-09	Sheet 1 of 1



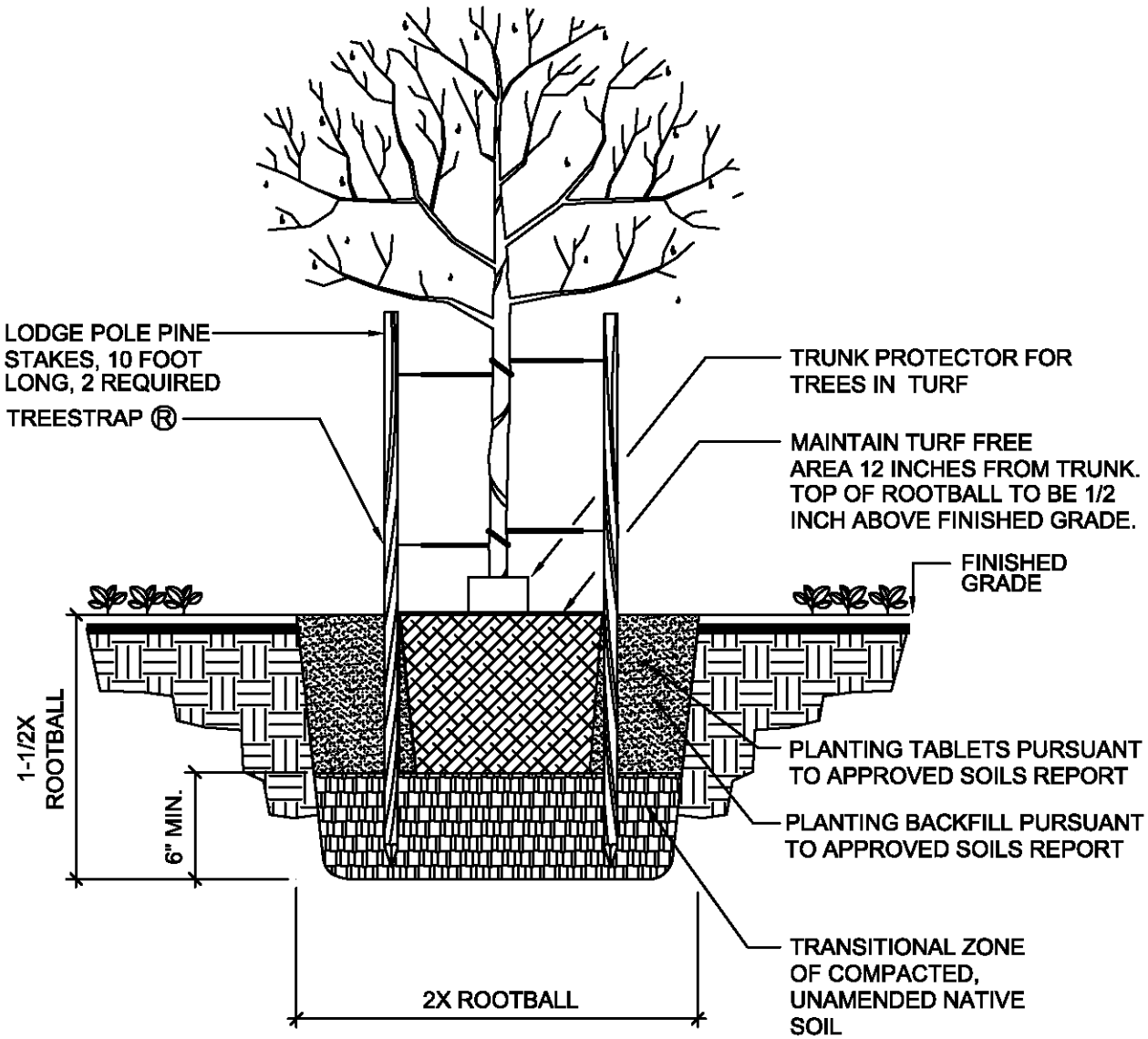
NOTE: LOCATE PLANTS SPACED EQUAL DISTANT (D) FROM EACH OTHER AS SHOWN ON PLANTING PLAN AND MINIMUM OF 12" FROM SPRINKLER HEAD.



NOTE: ALL PLANT BASINS SHALL RECEIVE A 2 INCH LAYER OF APPROVED MULCH. MULCH TO BE 6 INCHES AWAY FROM THE SHRUB STEM.

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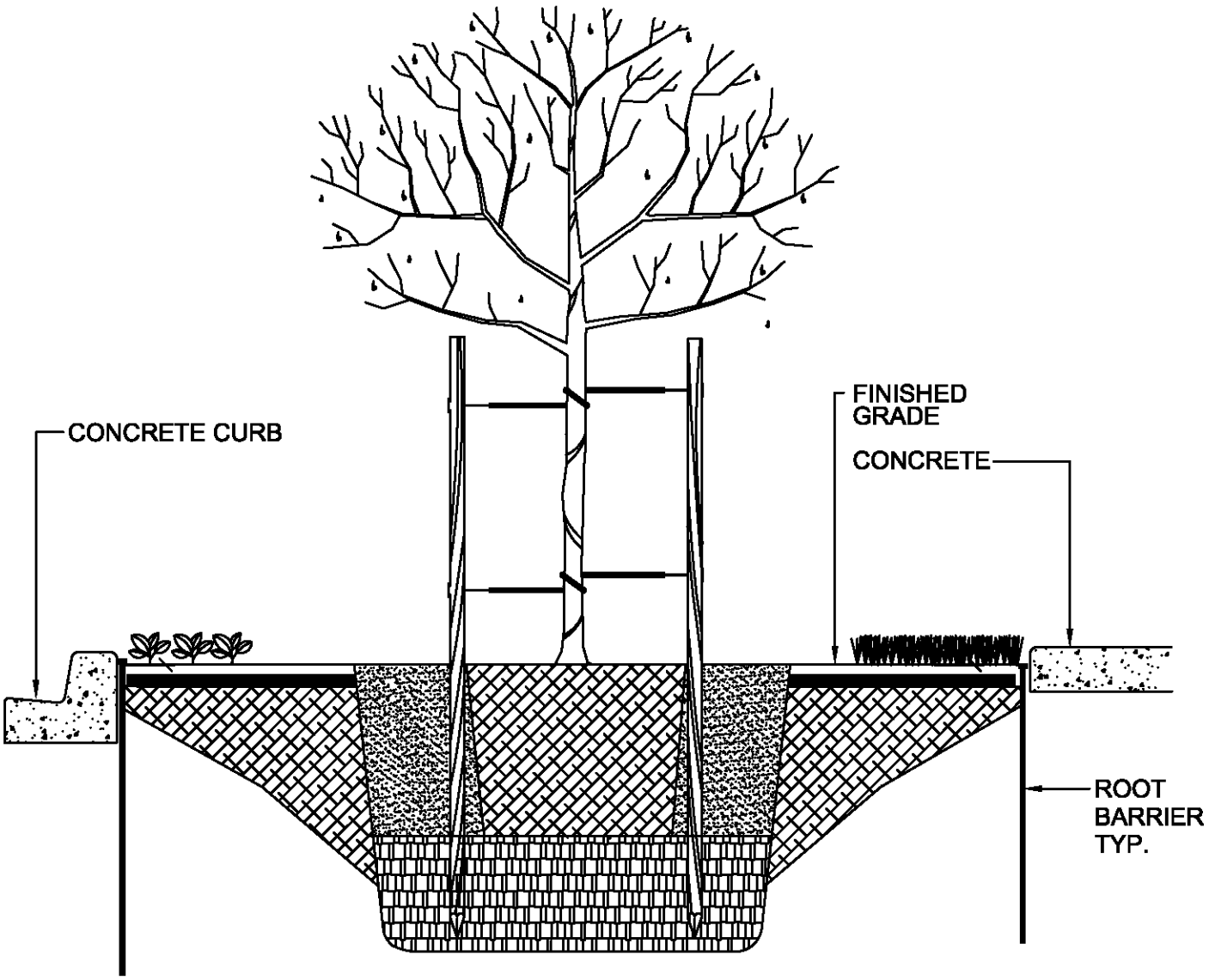
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SHRUB PLANTING	601
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1



NOTE: ALL PLANT BASINS SHALL RECEIVE A 2 INCH LAYER OF APPROVED MULCH. MULCH TO BE 6 INCHES AWAY FROM THE TREE TRUNK.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	DOUBLE STAKE TREE, 15 GAL. & 24 INCH BOX	**606**
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

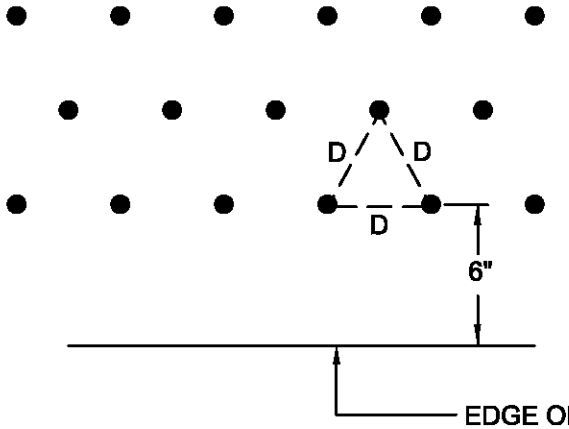


NOTE:

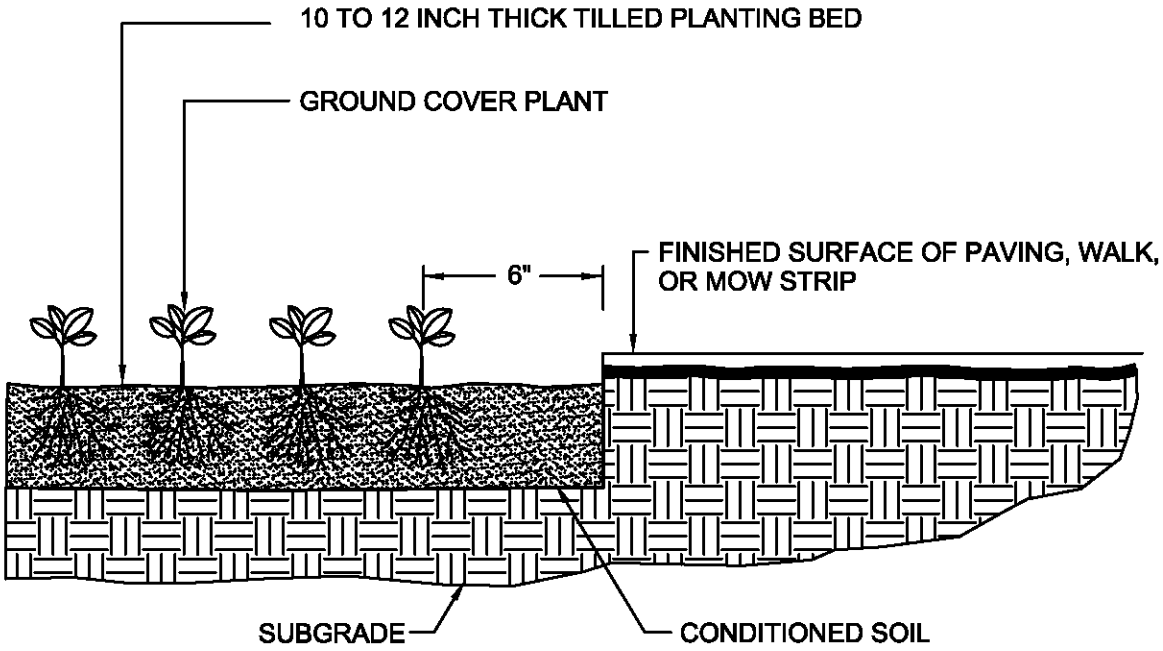
1. TOP OF ROOT CONTROL BARRIER MUST BE AT GRADE.
2. POSITION ROOT CONTROL BARRIER ADJACENT TO STRUCTURE.
3. RAISED ROOT DEFLECTORS MUST BE FACING PLANTED AREA.
4. PROVIDE A MIN. OF 12 FEET OF ROOT BARRIER EACH SIDE OF TREE TRUNK.
5. ROOT BARRIER SHALL EXTEND A MIN. OF 18 INCHES BELOW GRADE ON WALK SIDE.
6. ROOT BARRIER SHALL EXTEND A MIN. OF 24 INCHES BELOW GRADE ON CURB SIDE.
7. TREE PLANTING AND STAKING SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD PLAN NOS. 604 THROUGH 607.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	ROOT BARRIER	608
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date 6-22-09	Sheet 1 of 1



NOTE: LOCATE PLANTS SPACED EQUAL DISTANT (D) FROM EACH OTHER AS SHOWN ON PLANTING PLAN.



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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GROUND COVER PLANTING	609
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer Date: 6-22-09	Sheet 1 of 1

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF

STREETSCAPE REHABILITATION

C.I.P. No. 351501 & 351601

CITY OF IRVINE DOMESTIC WATER IRRIGATION METERS RETROFIT (12 METERS)

LANDSCAPE REHABILITATION FOR BARRANCA, ALTON, AND MAIN.

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION / PROJECT NAME
1	TITLE SHEET
2	A1–YALE AVE
3	A4 & A5–HERITAGE PARK
4	A6–MICHELSON DR
5	A7–ROSA DREW LN
6	A8–SAN JOAQUIN
7	A9–CULVER DR & UNIVERSITY DR
8–9	A10–MONTANAS ESTE – IRRIGATION PLANS
10–11	A10–MONTANAS ESTE – PLANTING PLANS
12	A12–DEERFIELD AVE
13	B5–CULVER DR & FERRIS ST
14	B13–MONTICELLO AVE
15	B15–TRIOMPHE AVE
16–18	BARRANCA PKWY – IRRIGATION PLANS
19–20	BARRANCA PKWY – PLANTING PLANS
21	ALTON PKWY – IRRIGATION PLANS
22	ALTON PKWY – PLANTING PLANS
23–24	MAIN ST – IRRIGATION PLANS
25	MAIN ST – PLANTING PLANS
26	IRRIGATION NOTES
27–29	IRRIGATION DETAILS & LEGEND
30	PLANTING LEGEND, DETAILS, & NOTES

IRWD PC# 3759

NOTICE TO CONTRACTOR

PURSUANT TO ASSEMBLY BILL 3019, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING IS PERFORMED:

1. **UNDERGROUND SERVICE ALERT** HAS BEEN CONTACTED AND HAS PROVIDED INQUIRY I.D.#_____
2. THE UNDERSIGNED AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D.# FROM **UNDERGROUND SERVICE ALERT** (1-800-422-4133) AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF EXCAVATION

SIGNED_____DATE _____

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

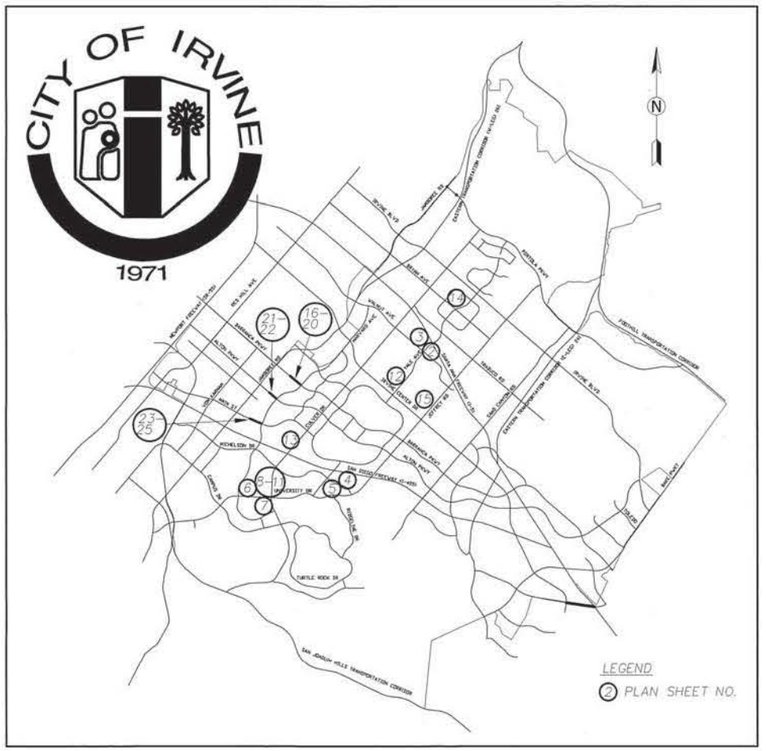
ONSITE APPROVAL: _____ DATE: 8-30-17

DIGALERT

DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG

TOLL FREE 1-800-227-2600

Underground Service Alert of Southern California



VICINITY MAP

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT — Expiration 8-31-18 — STATE OF CALIFORNIA

2033 — LANDSCAPE ARCHITECT

11/18/2016 — RLA No. — DATE

DRAWN BY: — DATE

DESIGNED BY: — DATE

CHECKED BY: — DATE

RECOMMENDED BY: — DATE

APPROVED BY: **CITY ENGINEER**

JIM HOULIHAN — R.C.E. NO. 51568 — 8/30/17 DATE

STREETSCAPE REHABILITATION

TITLE SHEET

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 1 OF 30

PATH =

DWG =

VIEW =

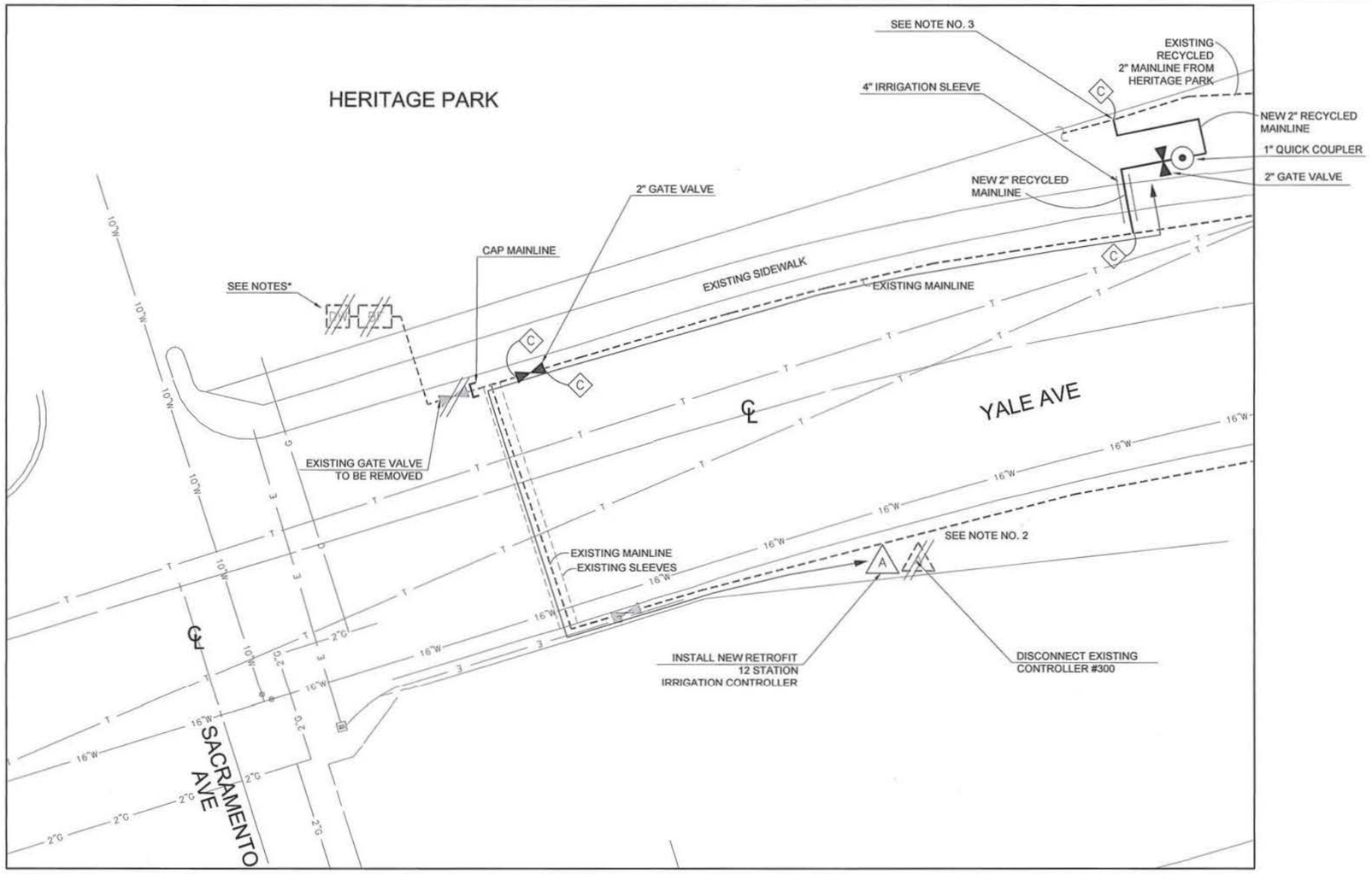
SHEET REVISED: 8/15/07

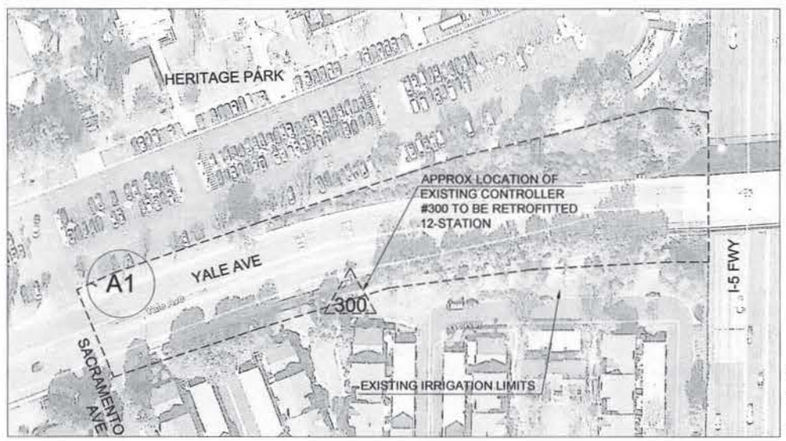
IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26 AND IRRIGATION LEGEND ON SHEET 29.
2. CONTRACTOR SHALL LOCATE AND DISCONNECT EXISTING IRRIGATION CONTROLLER #300 ON YALE AVE, AND INSTALL A NEW RETROFIT 12-STATION IRRIGATION CONTROLLER.
3. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
4. CONTRACTOR SHALL DISCONNECT EXISTING POTABLE SYSTEM AND CONNECT TO EXISTING RECLAIMED SYSTEM. (SEE NOTES* BELOW).
5. CONTRACTOR SHALL LOCATE ALL EXISTING QUICK COUPLER VALVES AND INSTALL IN A 10 INCH PLASTIC VALVE BOX PER CITY STANDARD PLAN 508, DETAIL A, SEE SHEET 27.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

6. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
7. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
8. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
9. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
10. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
11. IRWD REMOVES THE POTABLE WATER METER.
12. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
13. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
14. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
15. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
16. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.





VICINITY MAP
YALE AVE
NTS

A1 - EXISTING DOMESTIC WATER METER #60375370

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3579

ONSITE APPROVAL: _____ DATE: 8-30-17

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — CITY & TAYLOR — Rosenberg — 8-31-18 — 01-06-17 — STATE OF CALIFORNIA

2033 — 01-06-2017

LANDSCAPE ARCHITECT — LICENSE NO. — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

Scale: 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

STREETSCAPE REHABILITATION

A1 - YALE AVE

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 2 OF 30

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

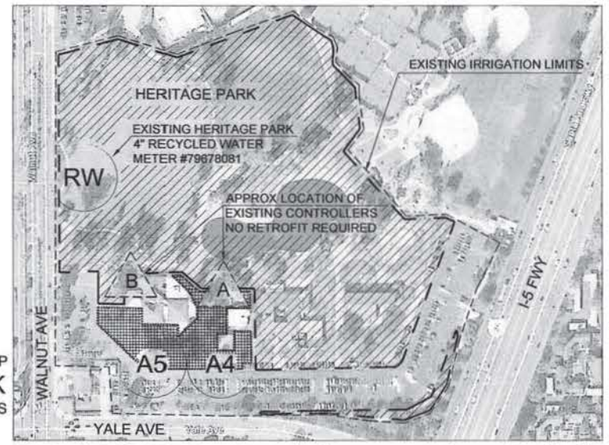
1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. CONTRACTOR SHALL INSTALL NEW 3" RECYCLED MAINLINE FOR THE COUNTY LIBRARY FOR EXISTING WATER METER #60375372.
3. CONTRACTOR SHALL INSTALL NEW 2" RECYCLED MAINLINE IN FRONT OF THE CHILDCARE CENTER AND ARTS AND CRAFTS CENTER FOR EXISTING WATER METER #60524194.
4. CONTRACTOR SHALL DISCONNECT EXISTING POTABLE SYSTEM AND CONNECT TO EXISTING RECLAIMED SYSTEM.
5. CONTRACTOR SHALL MAINTAIN IRRIGATION CONTROLLER "A" AND "B." THEY ARE CURRENTLY ALL ON RECYCLED SYSTEMS.
6. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
7. ALL DOMESTIC WATER METERS SERVING THE BUILDING MUST HAVE LEAD FREE R.P.P.D. BACKFLOW DEVICES.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

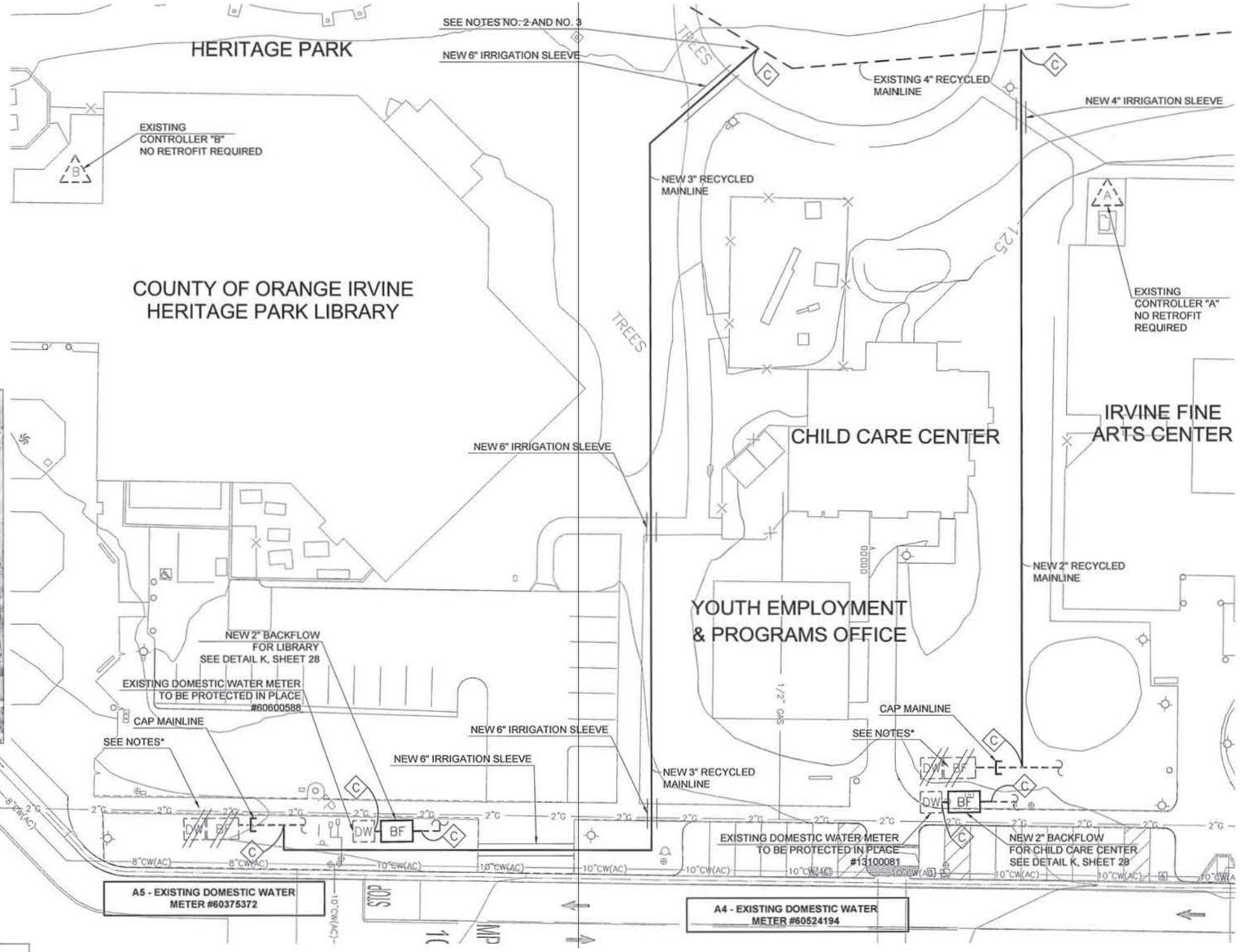
8. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
9. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
10. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
11. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
12. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
13. IRWD REMOVES THE POTABLE WATER METER.
14. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
15. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
16. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
17. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
18. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

EXISTING RW IRRIGATION SYSTEM

EXISTING DOMESTIC WATER TO BE CONVERTED TO RW



VICINITY MAP
HERITAGE PARK
NTS



RECYCLED WATER METER INFORMATION	
ADDRESS:	WALNUT, N OF FIRE STATION
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	3"
AREA SERVED	922,760 SQFT
EST. ANNUAL WATER USE	13290
STATIC PRESSURE	90 PSI
DESIGN PRESSURE	80 PSI

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17

Scale: 0' 10' 20' 40'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Expires 8-31-18

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

SHEET 3 OF 30

STREETSCAPE REHABILITATION

A4 & A5 - HERITAGE PARK

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26 AND IRRIGATION LEGEND ON SHEET 29.
2. THE CONTRACTOR SHALL LOCATE EXISTING IRRIGATION CONTROLLER #700, FROM THE NORTHEAST CORNER OF UNIVERSITY DR AND MICHELSON DR, APPROX. 300' EAST, AND REPLACE THE UNIVERSAL REMOTE CONNECTOR.
3. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
4. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A NEW ONE (1) INCH PVC CONDUIT.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

5. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
6. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
7. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
8. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
9. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
10. IRWD REMOVES THE POTABLE WATER METER.
11. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
12. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
13. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
14. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
15. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

A6 - EXISTING DOMESTIC WATER METER #23100427

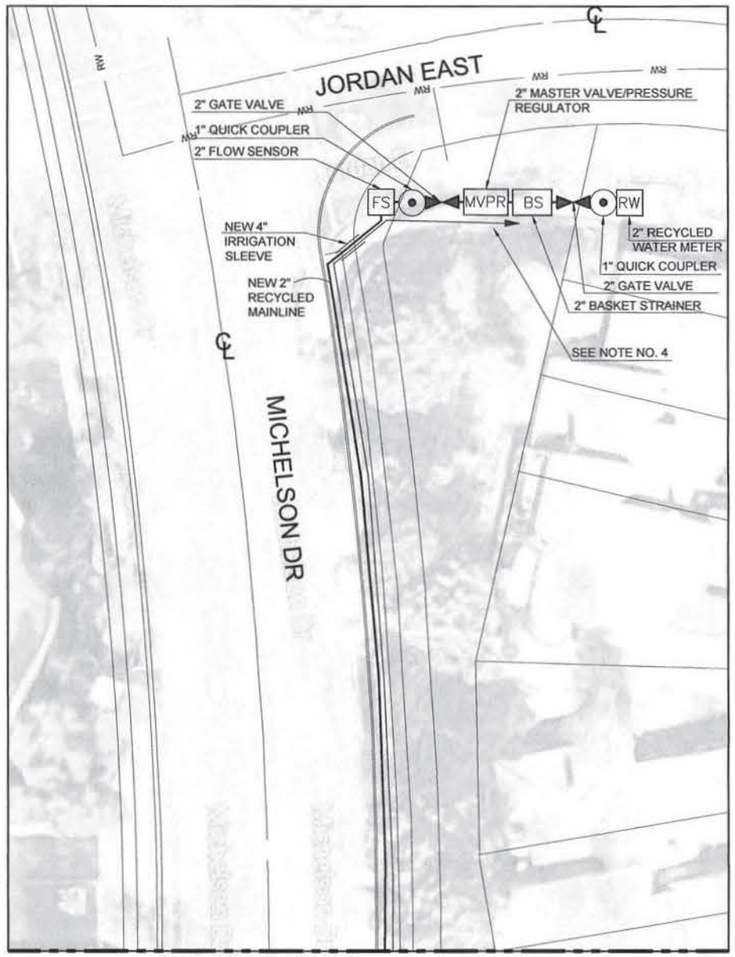
RECYCLED WATER METER INFORMATION	
ADDRESS:	17400.5 Jordan East
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	14,100 SQFT
EST. ANNUAL WATER USE	792 ccf
STATIC PRESSURE	129.9 PSI
DESIGN PRESSURE	80 PSI

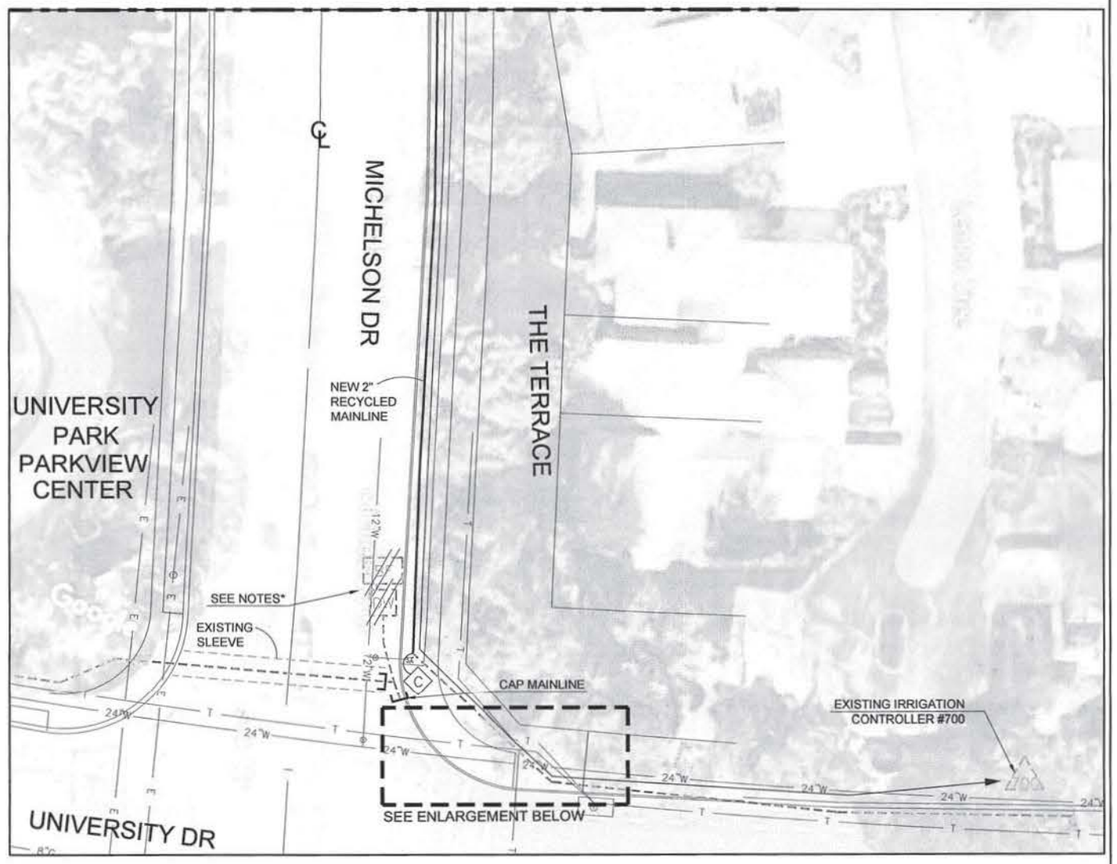
APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

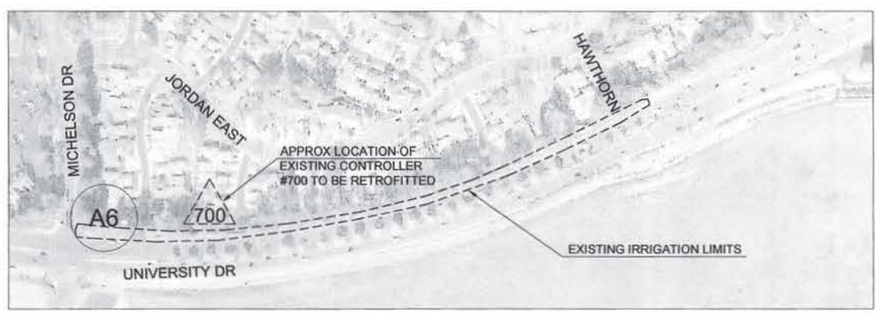
WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL: (949) 453-5300

PLAN CHECK # : 3759

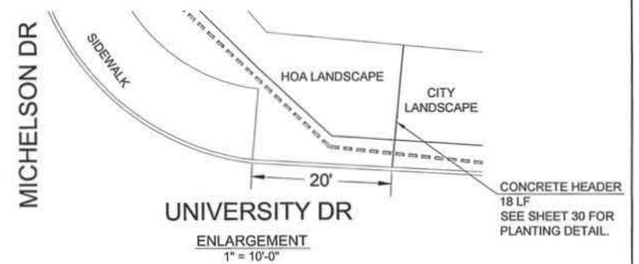
ONSITE APPROVAL: _____ DATE: 8-30-17







VICINITY MAP
MICHELSON DR &
UNIVERSITY DR
NTS



Scale: 0' 10' 20' 40'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:
LANDSCAPE ARCHITECT: 2033 LICENSE NO. 01-06-2017 DATE

DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE
RECOMMENDED BY: DATE

PLAN CHECK NO. 00687655-ELC
CIP NO. 351501 & 351601

STREETSCAPE REHABILITATION

A6 - MICHELSON DR

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.
SHEET 4 OF 30

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. CONTRACTOR SHALL VERIFY LOCATION OF IRRIGATION CONTROLLER #736 ON UNIVERSITY DRIVE BETWEEN ROSA DREW LANE AND YALE AVENUE. CONTRACTOR SHALL DISCONNECT EXISTING CONTROLLER #736 AND INSTALL A NEW RETROFIT 24-STATION IRRIGATION CONTROLLER.
3. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
4. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A NEW ONE (1) INCH PVC CONDUIT.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

6. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
7. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
8. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
9. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
10. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
11. IRWD REMOVES THE POTABLE WATER METER.
12. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
13. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
14. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
15. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
16. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

A7 - EXISTING DOMESTIC WATER METER #27866298

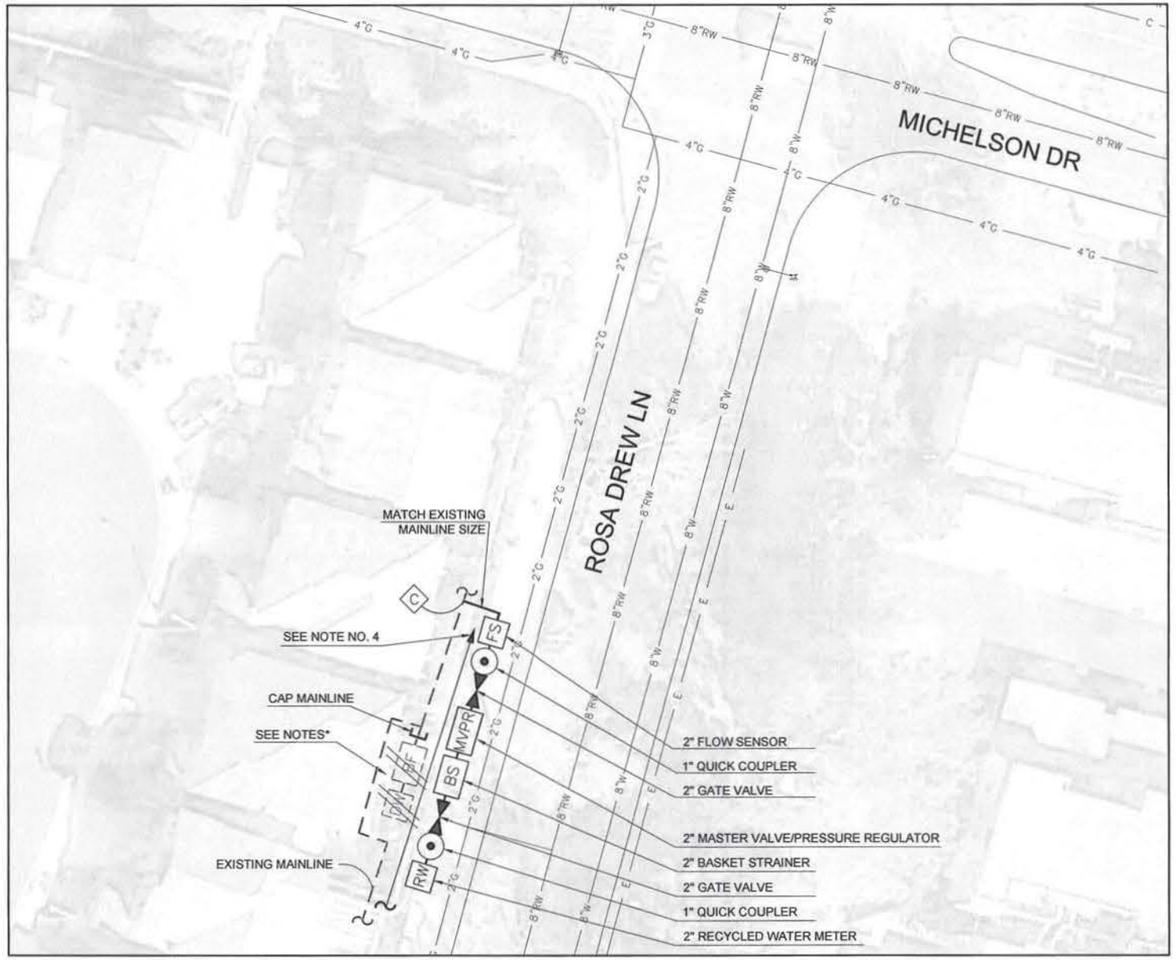
RECYCLED WATER METER INFORMATION	
ADDRESS:	17491.5 ROSA DREW LANE
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	35,500 SQFT
EST. ANNUAL WATER USE	1281 ccf
STATIC PRESSURE	99.6 PSI
DESIGN PRESSURE	80 PSI

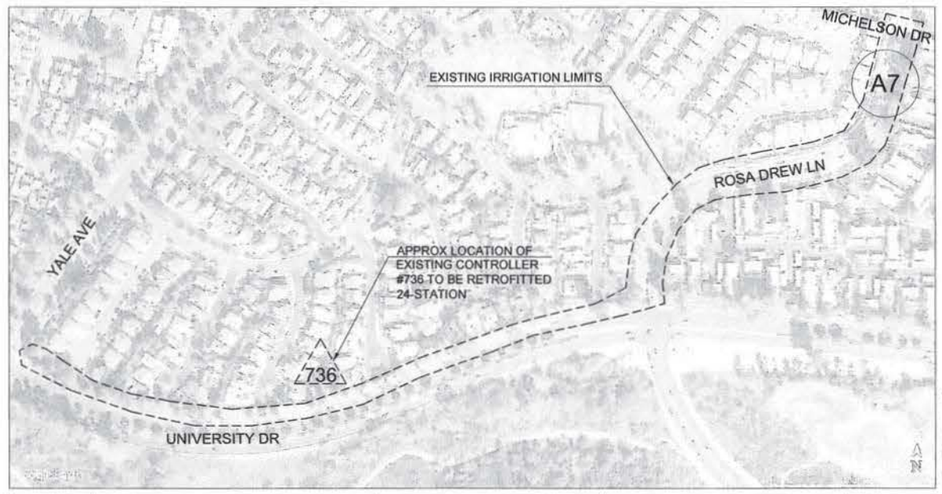
APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17





VICINITY MAP

ROSA DREW LN & UNIVERSITY DR

NTS

Scale 0' 10' 20' 40'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT, STATE OF CALIFORNIA, Raymond, 6-30-18, 01-05-17

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

STREETSCAPE REHABILITATION

A7 - ROSA DREW LN

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

SHEET 5 OF 30

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. EXISTING IRRIGATION CONTROLLER #706 IS SHARED WITH WATER METER A9 ON SHT 7. THE EXISTING CONTROLLER IS A HYDROPOINT WEATHER TRAK PRO 3 CONTROLLER AND WILL NOT REQUIRE A RETROFIT.
3. THE EXISTING IRRIGATION CONTROLLER (#706) IS LOCATED ON THE NORTHWEST CORNER OF SAN JOAQUIN AND UNIVERSITY DRIVE.
4. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE EXISTING CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
5. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A NEW ONE (1) INCH PVC CONDUIT.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

6. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
7. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
8. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
9. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
10. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
11. IRWD REMOVES THE POTABLE WATER METER.
12. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
13. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
14. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
15. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
16. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

A8 - EXISTING DOMESTIC WATER METER #23908734

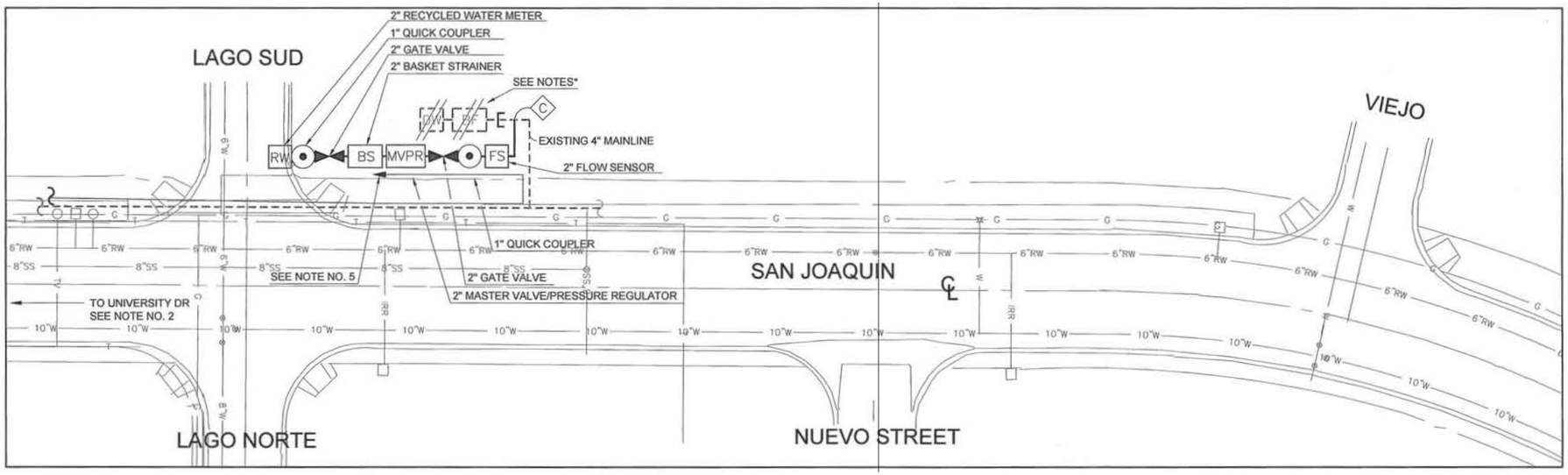
RECYCLED WATER METER INFORMATION	
ADDRESS:	18601.25 SAN JOAQUIN
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	7,050 SQFT
EST. ANNUAL WATER USE	201 ccf
STATIC PRESSURE	116.5 PSI
DESIGN PRESSURE	80 PSI

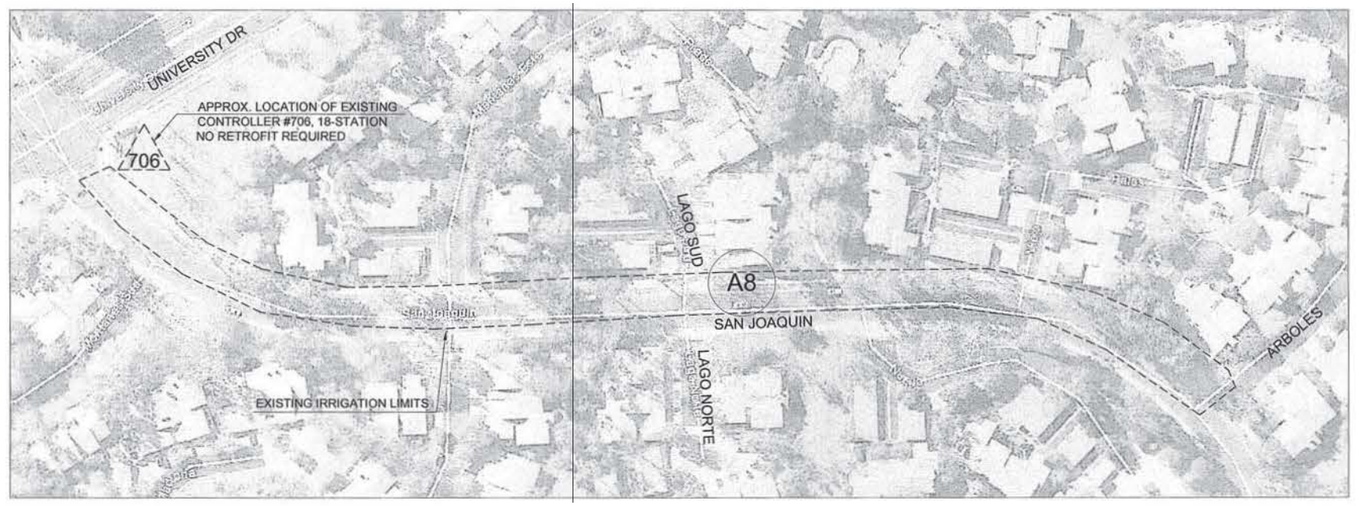
APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17





VICINITY MAP
SAN JOAQUIN
NTS

Scale: 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — DAVID P. WATSON JR. — Reg. No. 2033 — 6-30-18 — 01-06-12 — STATE OF CALIFORNIA

2033 01-06-2017
LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:		DATE
DESIGNED BY:		DATE
CHECKED BY:		DATE
RECOMMENDED BY:		DATE

STREETSCAPE REHABILITATION

A8 - SAN JOAQUIN

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 6 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 29 AND IRRIGATION LEGEND ON SHEET 26.
2. THE EXISTING IRRIGATION CONTROLLER FOR A9 WATER METER IS #706 AND IS SHARED WITH A8 WATER METER ON SHT 6. NO IRRIGATION CONTROLLER RETROFIT IS REQUIRED.
3. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE EXISTING CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
4. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A NEW ONE (1) INCH PVC CONDUIT.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

5. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
6. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
7. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
8. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
9. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
10. IRWD REMOVES THE POTABLE WATER METER.
11. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
12. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
13. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
14. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
15. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

A9 - EXISTING DOMESTIC WATER METER #23908736

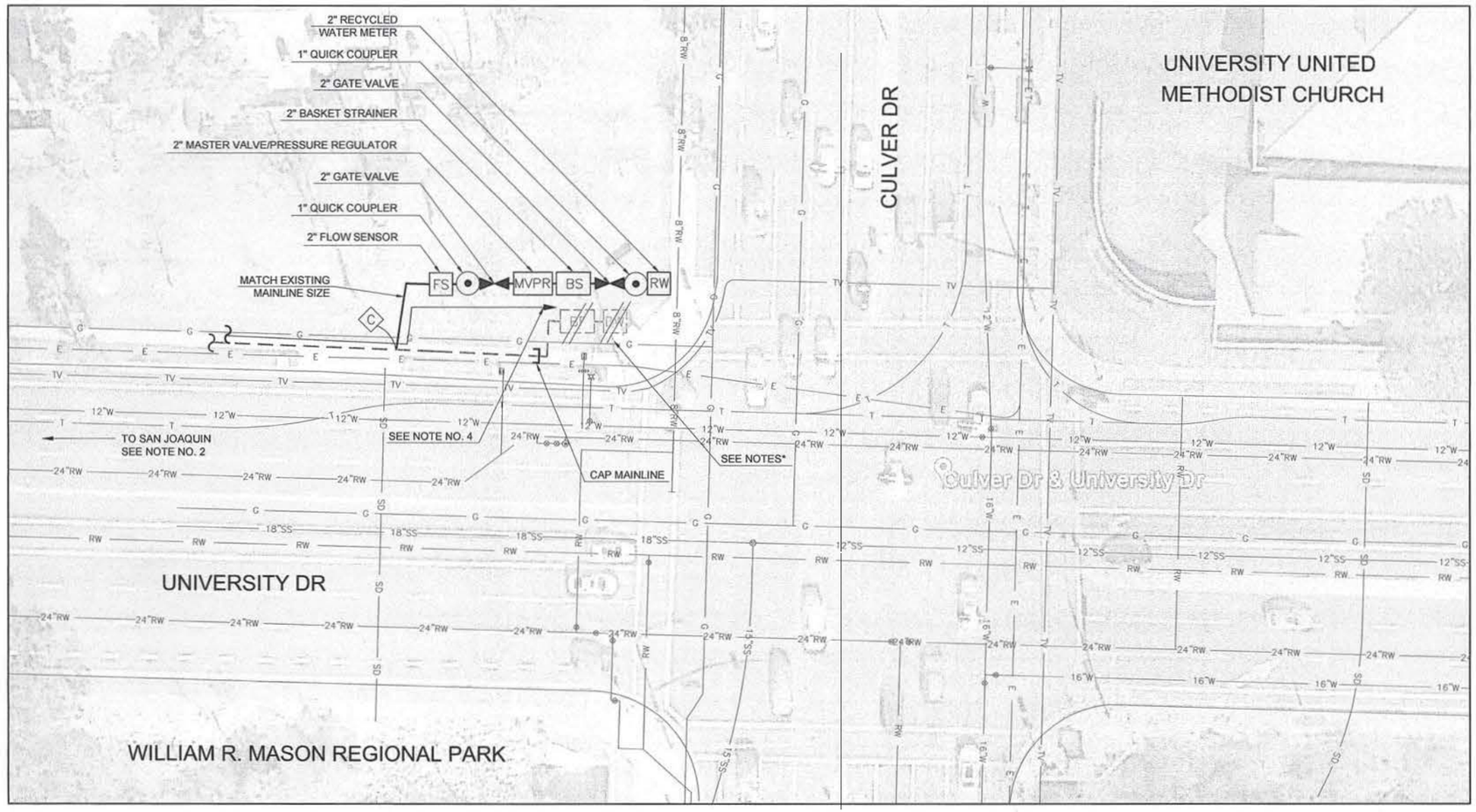
RECYCLED WATER METER INFORMATION	
ADDRESS:	18500 CULVER DR/ UNIVERSITY
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	7,100 SQFT
EST. ANNUAL WATER USE	397 ccf
STATIC PRESSURE	121.2 PSI
DESIGN PRESSURE	80 PSI

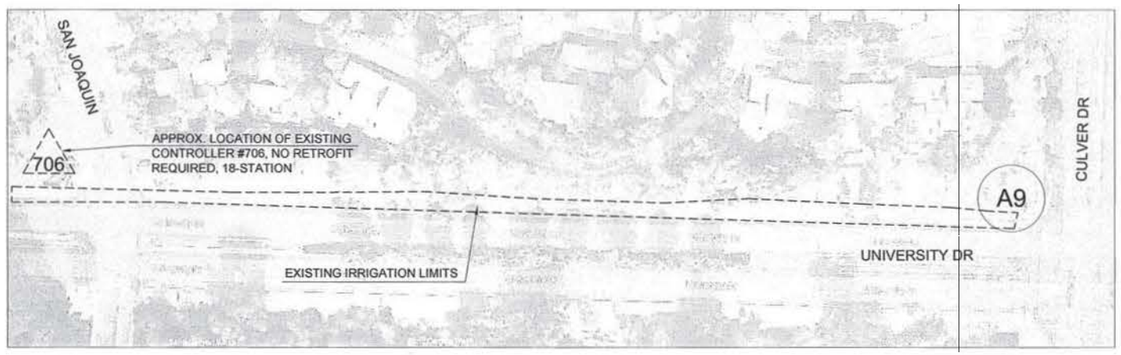
APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17





VICINITY MAP

CULVER DR & UNIVERSITY DR

NTS

Scale 0' 10' 20' 40'

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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4					
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1	6/15/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — DAVID A. TAYLOR — Revised 2-11-18, 01-26-17 — STATE OF CALIFORNIA

2933 — LANDSCAPE ARCHITECT — LICENSE NO. — 01-06-2017 — DATE

DRAWN BY:		DATE
DESIGNED BY:		DATE
CHECKED BY:		DATE
RECOMMENDED BY:		DATE

STREETSCAPE REHABILITATION

A9 - CULVER DR & UNIVERSITY DR

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

SHEET 7 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES:

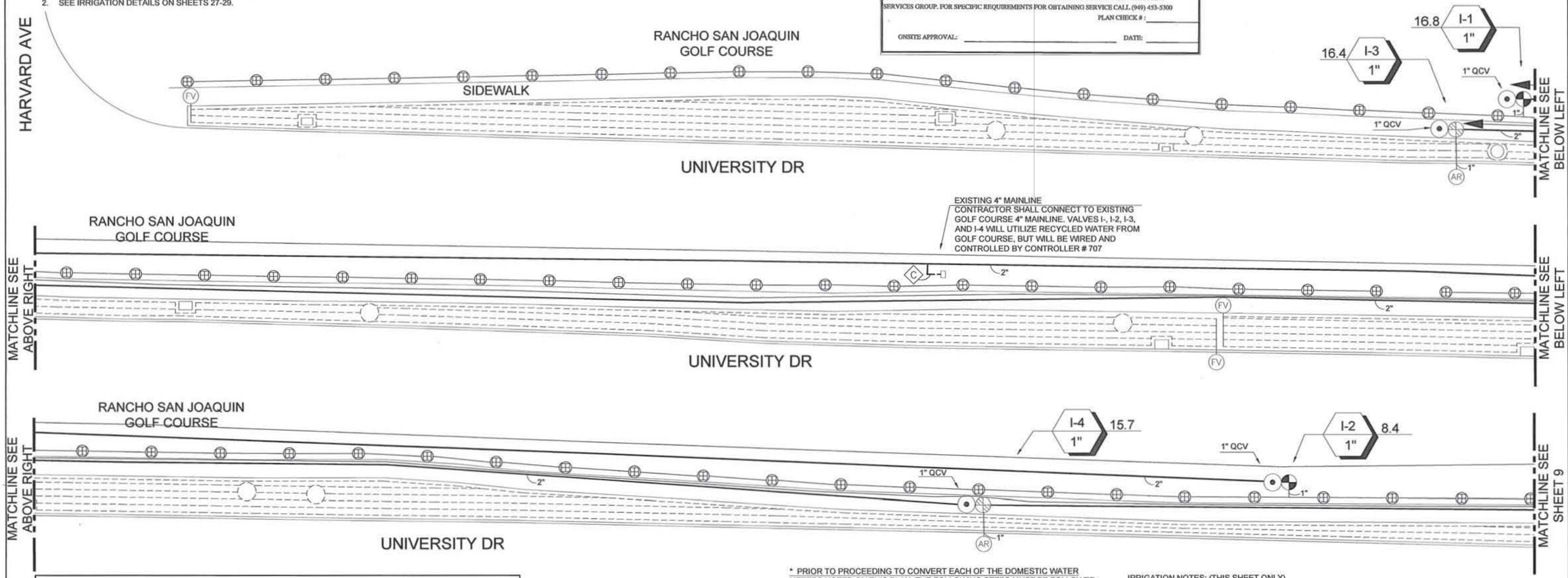
1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : _____

ONSITE APPROVAL: _____ DATE: _____



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	MP ROTORS	HUNTER	PROS-06-PRS30-MP100090
	REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
DW	EXISTING DOMESTIC WATER METER	CITY OF IRVINE	--
BS	BASKET STRAINER	WATTS	97FB-CSSIB (2") (30 MESH)
PR	PRESSURE REDUCING VALVE	WILKINS	500HLR (2-1/2")
MVPR	MASTER VALVE/PRESSURE REGULATOR	CLA-VAL COMBO MASTER VALVE AND PRESSURE REGULATOR	93-01/693-01 (2")
FS	FLOW SENSOR/ FLOW METER (FS)	RAIN MASTER / DATA INDUSTRIAL	FS-B150 (1½") & FS-B200 (2") / 220 SERIES
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 ½")
	EXISTING IRRIGATION CONTROLLER	--	--
RW	RECYCLED WATER METER	CITY OF IRVINE	1 1/2" DISC & 2" DISC RECYCLED WATER METER
	CONTROL WIRES	DIRECT BURIAL	--
	MAINLINE	PURPLE PIPE CLASS 315 2"	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

A10 - EXISTING DOMESTIC WATER METER #24794371

RECYCLED WATER METER INFORMATION	
ADDRESS:	18701.5 UNIVERSITY DRIVE
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	10,200 SQFT
EST. ANNUAL WATER USE	268
STATIC PRESSURE	90.9 PSI
DESIGN PRESSURE	80 PSI

PC#3754
Mark Filce 8.30.17

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

8. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
9. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
10. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
11. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
12. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
13. IRWD REMOVES THE POTABLE WATER METER.
14. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
15. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
16. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
17. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
18. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26 AND IRRIGATION LEGEND ON SHEETS 27- 29.
2. CONTRACTOR SHALL VERIFY EXISTING IRRIGATION CONTROLLER #707 AND NUMBER OF OPERATING STATIONS PRIOR TO RETROFIT. THE EXISTING IRRIGATION CONTROLLER IS LOCATED ON THE NORTHEAST CORNER OF UNIVERSITY DR AND HARVARD AVE.
3. CONTRACTOR SHALL LOCATE AND DISCONNECT EXISTING IRRIGATION CONTROLLER #707, AND INSTALL A NEW RETROFIT 48-STATION IRRIGATION CONTROLLER.
4. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
5. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A NEW ONE (1) INCH PVC CONDUIT.
6. CONTRACTOR SHALL INSTALL REMOTE CONTROL VALVES FOR DRIP IRRIGATION IN LANDSCAPE AREA BETWEEN THE CURB AND SIDEWALK.
7. CONTRACTOR SHALL REMOVE EXISTING IRRIGATION COMPONENTS EXCLUDING THE IRRIGATION CONTROLLER AND ELECTRICAL CONNECTION, PRIOR TO WORK.

Scale 0' 5' 10' 20'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LANDSCAPE ARCHITECT 2033 LICENSE NO. 01-06-2017 DATE

DRAWN BY: DATE

DESIGNED BY: DATE

CHECKED BY: DATE

RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION

A10 - MONTANAS ESTE - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 8 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.

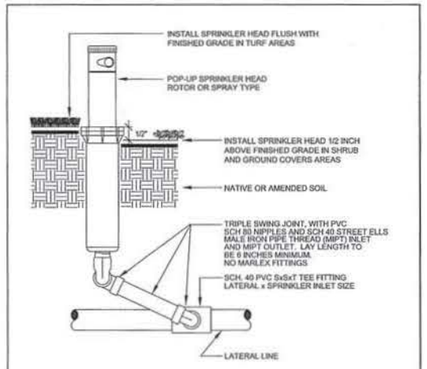
MATCHLINE SEE SHEET 8

RANCHO SAN JOAQUIN GOLF COURSE

HOA PROPERTY

MATCHLINE SEE BELOW LEFT

UNIVERSITY DR



NOTE:

INSTALL SPRINKLER HEADS 2 INCHES FROM PAVING EDGE.

INSTALL SPRINKLER HEADS PLUMB. ADJUST NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.

USE TEFLON TAPE ON ALL THREADED FITTINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	POP-UP SPRINKLER (6 INCH)	522

Approved for City Engineer: Mark C. Carroll P.E. 2/28/05 — Date: 4-20-06 — Sheet 1 of 1

MATCHLINE SEE ABOVE RIGHT

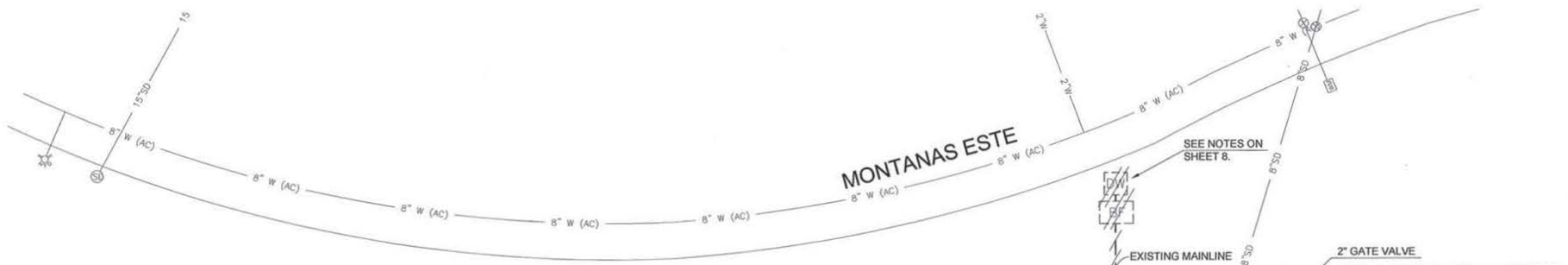
15.0 I-5 1"

1" QCV

2"

AR

1"



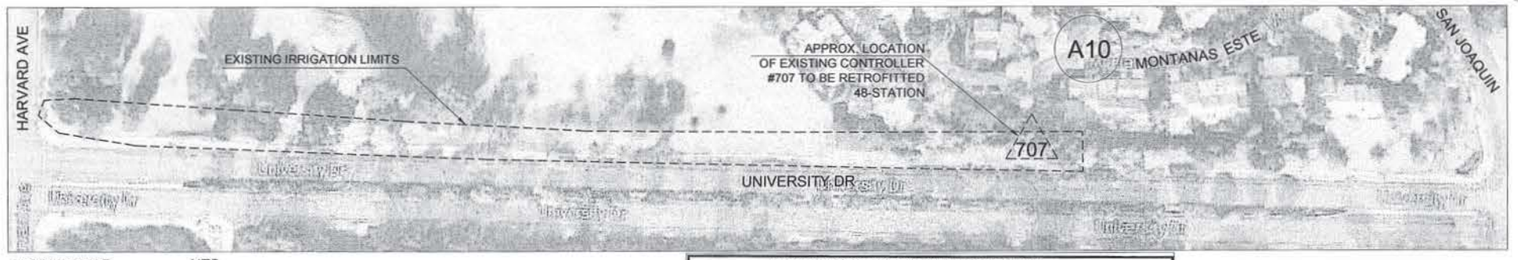
HOA PROPERTY

UNIVERSITY DR

FV

IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
- - - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	MP ROTORS	HUNTER	PROS-08-PRS30-MP100090
	REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
DW	EXISTING DOMESTIC WATER METER	CITY OF IRVINE	--
BS	BASKET STRAINER	WATTS	97FB-CSSIB (2") (30 MESH)
PR	PRESSURE REDUCING VALVE	WILKINS	500HLR (2-1/2")
MVPR	MASTER VALVE/PRESSURE REGULATOR	CLA-VAL COMBO MASTER VALVE AND PRESSURE REGULATOR	93-01/693-01 (2")
FS	FLOW SENSOR/ FLOW METER (FS)	RAIN MASTER / DATA INDUSTRIAL	FS-B150 (1½") & FS-B200 (2") / 220 SERIES
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 ½")
	EXISTING IRRIGATION CONTROLLER	--	--
RW	RECYCLED WATER METER	CITY OF IRVINE	1 1/2" DISC & 2" DISC RECYCLED WATER METER
	CONTROL WIRES	DIRECT BURIAL	--
	MAINLINE	PURPLE PIPE CLASS 315 2"	--



VICINITY MAP NTS

MONTANAS ESTE & UNIVERSITY DR

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17

Scale 0' 5' 10' 20'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — KEITH A. RAYBURN — Signature 8-31-18 Renewal Date 01-06-17 — STATE OF CALIFORNIA

2033 — LANDSCAPE ARCHITECT — LICENSE NO. — 01-06-2017 — DATE

		DATE
DRAWN BY:		
DESIGNED BY:		
CHECKED BY:		
RECOMMENDED BY:		

STREETSCAPE REHABILITATION

A10 - MONTANAS ESTE - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

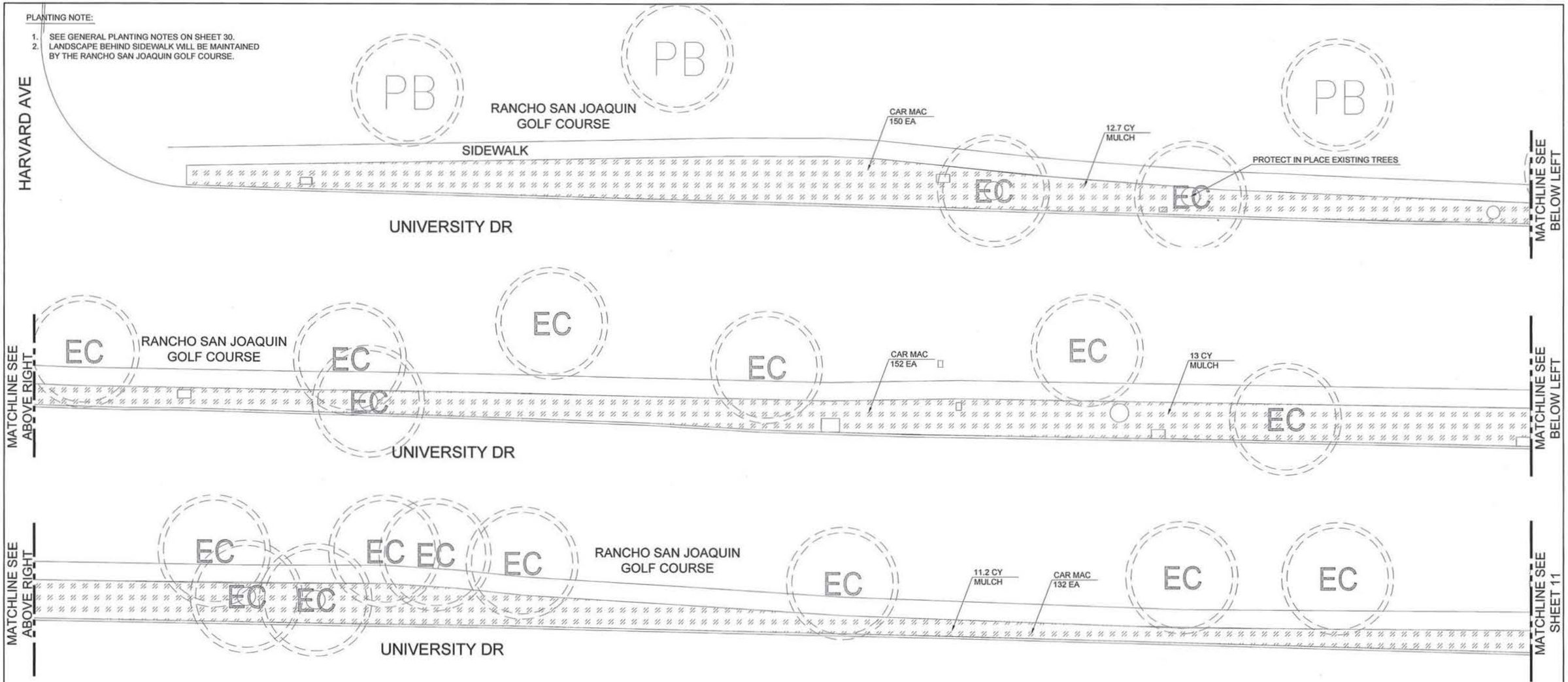
SHEET 9 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

PLANTING NOTE:

1. SEE GENERAL PLANTING NOTES ON SHEET 30.
2. LANDSCAPE BEHIND SIDEWALK WILL BE MAINTAINED BY THE RANCHO SAN JOAQUIN GOLF COURSE.



PLANTING LEGEND					
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	434	SEE CITY STD PLAN NO. 609 ON SHT 30.

0' 5' 10' 20'
Scale

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — KYLE S. TATSUNO — No. 5033 — Renewal 8-31-18 — Renewal 2019 — 01-06-17 — STATE OF CALIFORNIA

2033 01-06-2017
LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE
RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION

A10 - MONTANAS ESTE - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

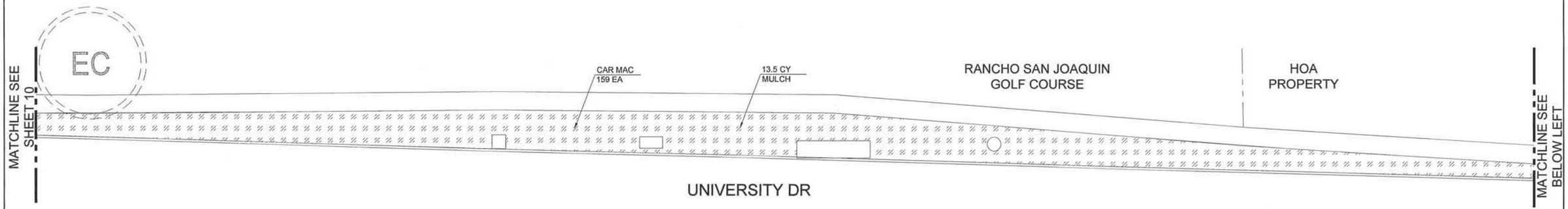
SHEET 10 OF 30

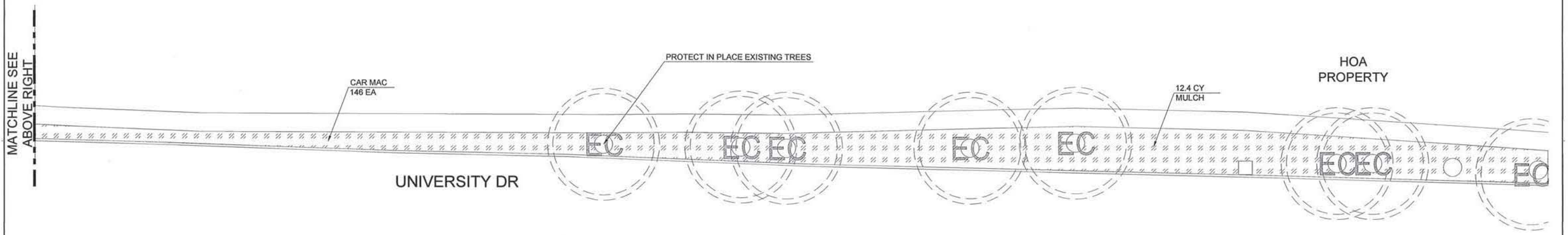
PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

PLANTING NOTE:

1. SEE GENERAL PLANTING NOTES ON SHEET 30.
2. LANDSCAPE BEHIND SIDEWALK WILL BE MAINTAINED BY THE RANCHO SAN JOAQUIN GOLF COURSE.





PLANTING LEGEND					
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	305	SEE CITY STD PLAN NO. 609 ON SHT 30.

Scale 0' 5' 10' 20'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT — DAVID A. PATTERSON — Signature 8-31-18 — Renewal Date 01-06-12 — STATE OF CALIFORNIA

2033 LANDSCAPE ARCHITECT LICENSE NO. 01-06-2017 DATE

DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE
RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION

A10 - MONTANAS ESTE - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 11 OF 30

PATH = DWG = VIEW =

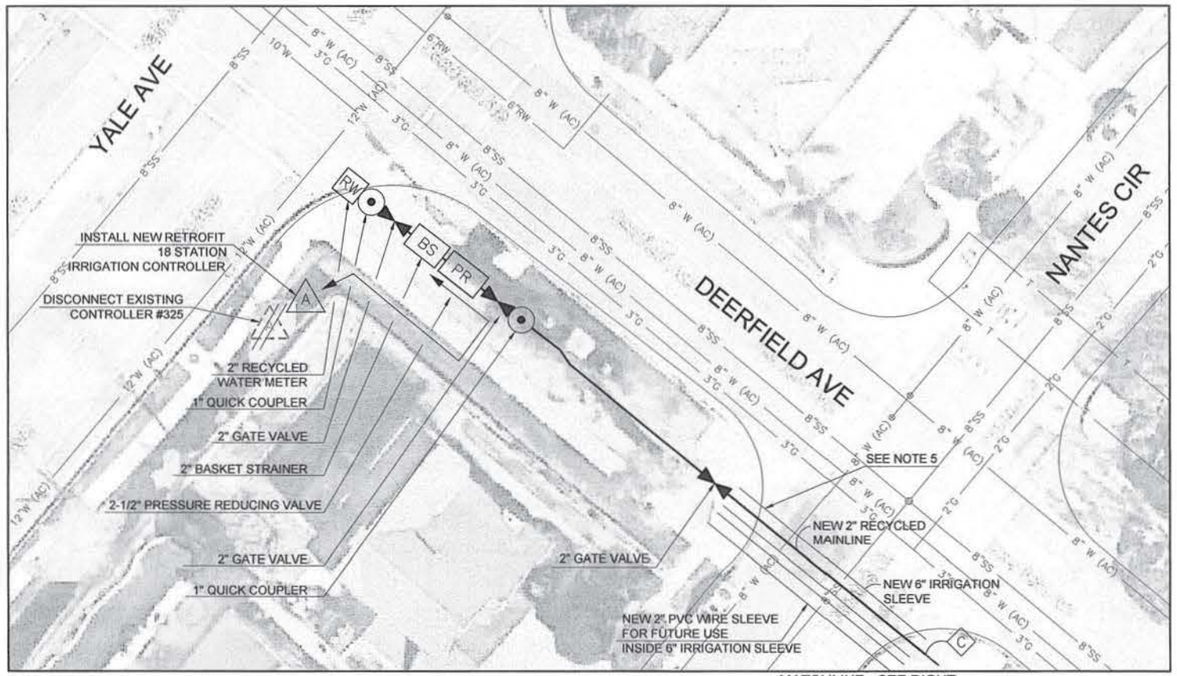
SHEET REVISED: 8/15/07

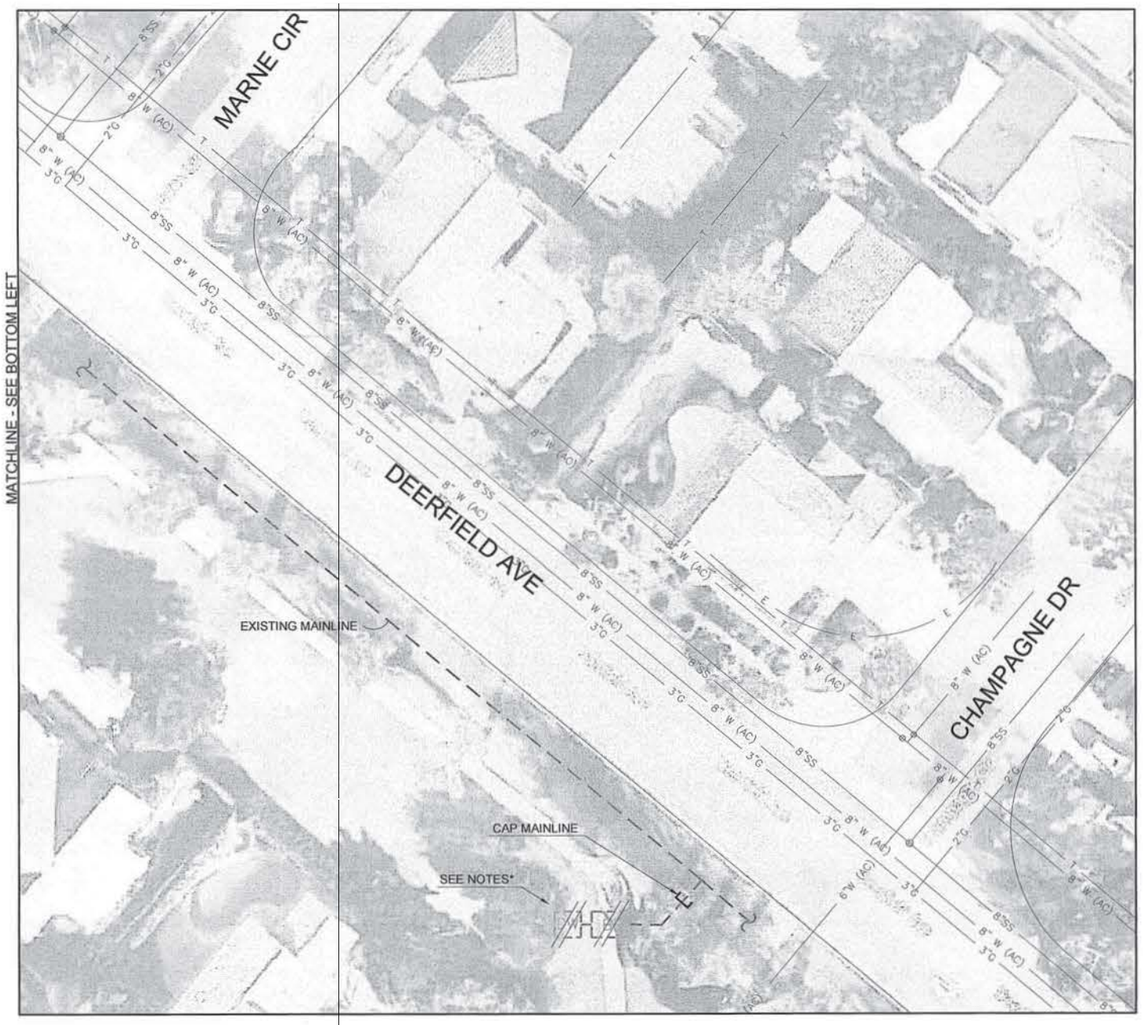
IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26 AND IRRIGATION LEGEND ON SHEET 27-29.
2. CONTRACTOR SHALL TRENCH BACK AND CONNECT TO EXISTING IRRIGATION SYSTEM.
3. CONTRACTOR SHALL LOCATE AND DISCONNECT EXISTING IRRIGATION CONTROLLER #325 AND INSTALL A NEW RETROFIT 18-STATION IRRIGATION CONTROLLER.
4. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM..
5. CONTRACTOR SHALL DIRECTIONAL BORE 6" IRRIGATION SLEEVE UNDER NANTES CIR. CONTACT DIG ALERT PRIOR TO WORK.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

6. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
7. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
8. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
9. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
10. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
11. IRWD REMOVES THE POTABLE WATER METER.
12. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
13. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
14. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
15. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
16. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.





A12 - EXISTING DOMESTIC WATER METER #60290549

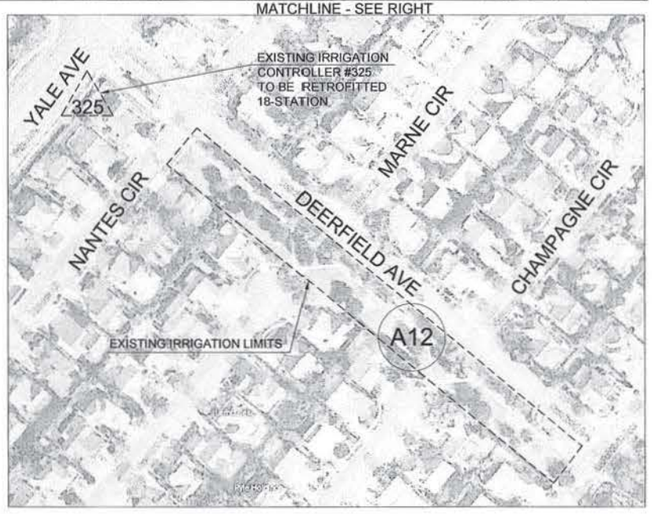
RECYCLED WATER METER INFORMATION	
ADDRESS:	15251.25 YALE
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	69,500 SQFT
EST. ANNUAL WATER USE	1009 ccf
STATIC PRESSURE	104.3 PSI
DESIGN PRESSURE	80 PSI

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17



VICINITY MAP
DEERFIELD AVE
NTS

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — Exp. 01-31-18 — Renewal Date 01-05-12 — STATE OF CALIFORNIA

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION

A12 - DEERFIELD AVE

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 12 OF 30

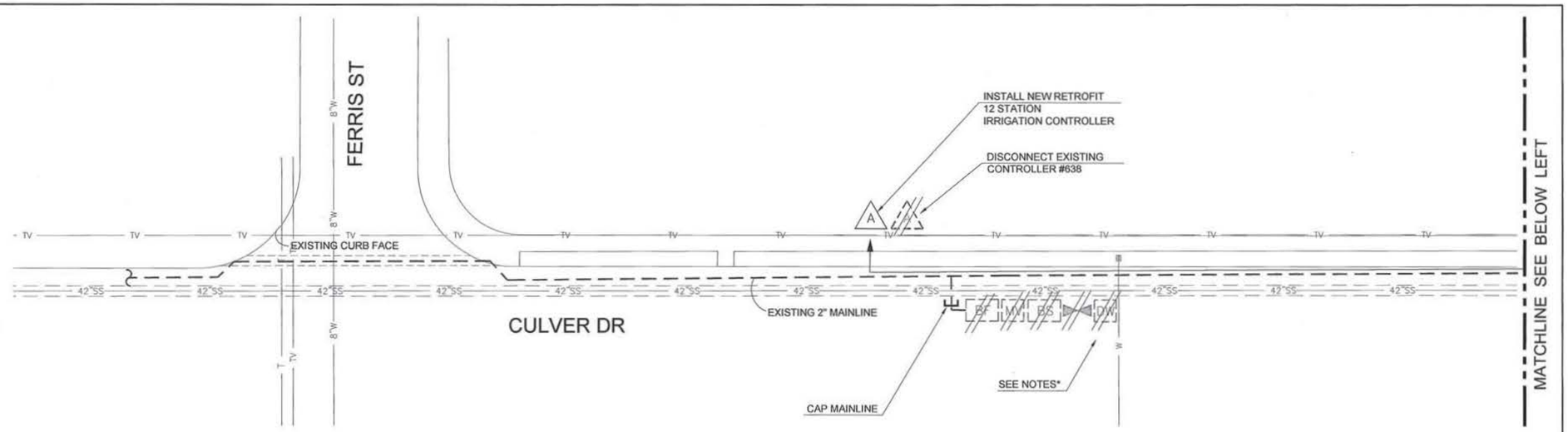
SHEET REVISED: 8/15/07

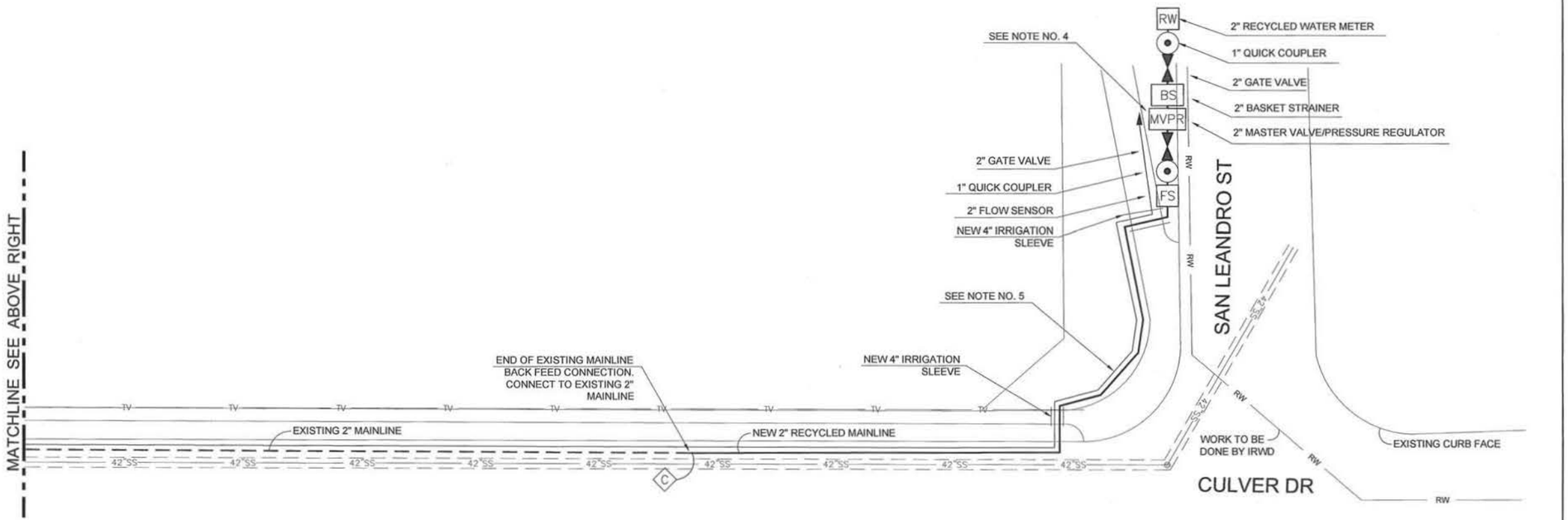
IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. CONTRACTOR SHALL LOCATE AND DISCONNECT EXISTING CONTROLLER #638, ON CULVER DR, AND INSTALL A NEW RETROFIT 12-STATION IRRIGATION CONTROLLER.
3. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE NEW RETROFITTED CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.
4. CONTRACTOR SHALL FURNISH AND INSTALL MASTER VALVE AND FLOW SENSOR AND CONNECT IT TO THE NEW OR EXISTING CONTROLLER. IF THE CONTROLLER IS NOT WITHIN THE VICINITY OF THE POINT OF CONNECTION ASSEMBLY, THEN CONTRACTOR SHALL TRENCH AND INSTALL CONTROL WIRES AND UTILIZE THE EXISTING IRRIGATION SLEEVES UNDER STREETS AND DRIVEWAYS. FLOW SENSOR WIRES SHALL BE PLACED WITHIN A ONE (1) INCH PVC CONDUIT.
5. CONTRACTOR SHALL REPLACE IN KIND ALL DISTURBED LANDSCAPE AND IRRIGATION AT CORNER THAT IS CURRENTLY OWNED AND MAINTAINED BY HOA DURING CONSTRUCTION. CONTRACTOR SHALL CHECK AND TEST HOA IRRIGATION SYSTEM TO ENSURE THE SYSTEM IS FUNCTIONING PROPERLY.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

6. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
7. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
8. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
9. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
10. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
11. IRWD REMOVES THE POTABLE WATER METER.
12. CONTRACTOR REMOVES RP BACKFLOW, MASTER VALVE, BASKET STRAINER, AND GATE VALVE AND CAPS THE LINE. ALL OF THE REMOVED DEVICES TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
13. AFTER REMOVAL OF WATER METER, BACKFLOW PREVENTER, MASTER VALVE, BASKET STRAINER, AND GATE VALVE, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
14. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
15. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
16. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.





B5 - EXISTING DOMESTIC WATER METER #98145518

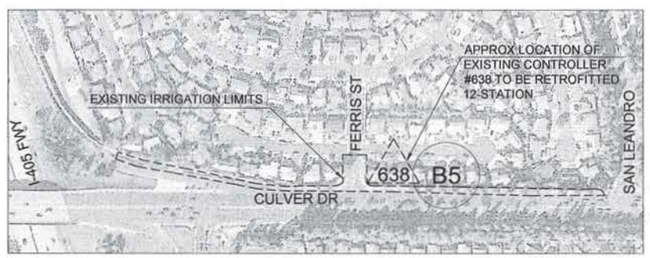
RECYCLED WATER METER INFORMATION	
ADDRESS:	17351.25 CULVER
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	2"
AREA SERVED	8,830 SQFT
EST. ANNUAL WATER USE	160 ccf
STATIC PRESSURE	114.3 PSI
DESIGN PRESSURE	80 PSI

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17



VICINITY MAP

CULVER DR & FERRIS ST

NTS

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — DAVID A. TATSUNO — No. 2033 — Renewal 8-31-18 — Renewal 9-01-12 — 01-06-12 — STATE OF CALIFORNIA

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION

B5 - CULVER DR & FERRIS ST

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 13 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. CONTRACTOR SHALL DISCONNECT EXISTING POTABLE SYSTEM AND CONNECT TO EXISTING RECLAIMED SYSTEM. RETURN ALL REMOVED BACKFLOW COMPONENTS TO PUBLIC WORK'S LANDSCAPE DIVISION.
3. CONTRACTOR SHALL VERIFY EXISTING IRRIGATION CONTROLLER #53 AND NUMBER OF OPERATING STATIONS.
4. CONTRACTOR SHALL DIRECTIONAL BORE 6" IRRIGATION SLEEVE UNDER MONTICELLO AVE. CONTACT DIG ALERT PRIOR TO WORK.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

5. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
6. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
7. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
8. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
9. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
10. IRWD REMOVES THE POTABLE WATER METER.
11. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
12. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
13. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
14. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
15. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

B13 - EXISTING DOMESTIC WATER METER #51704821

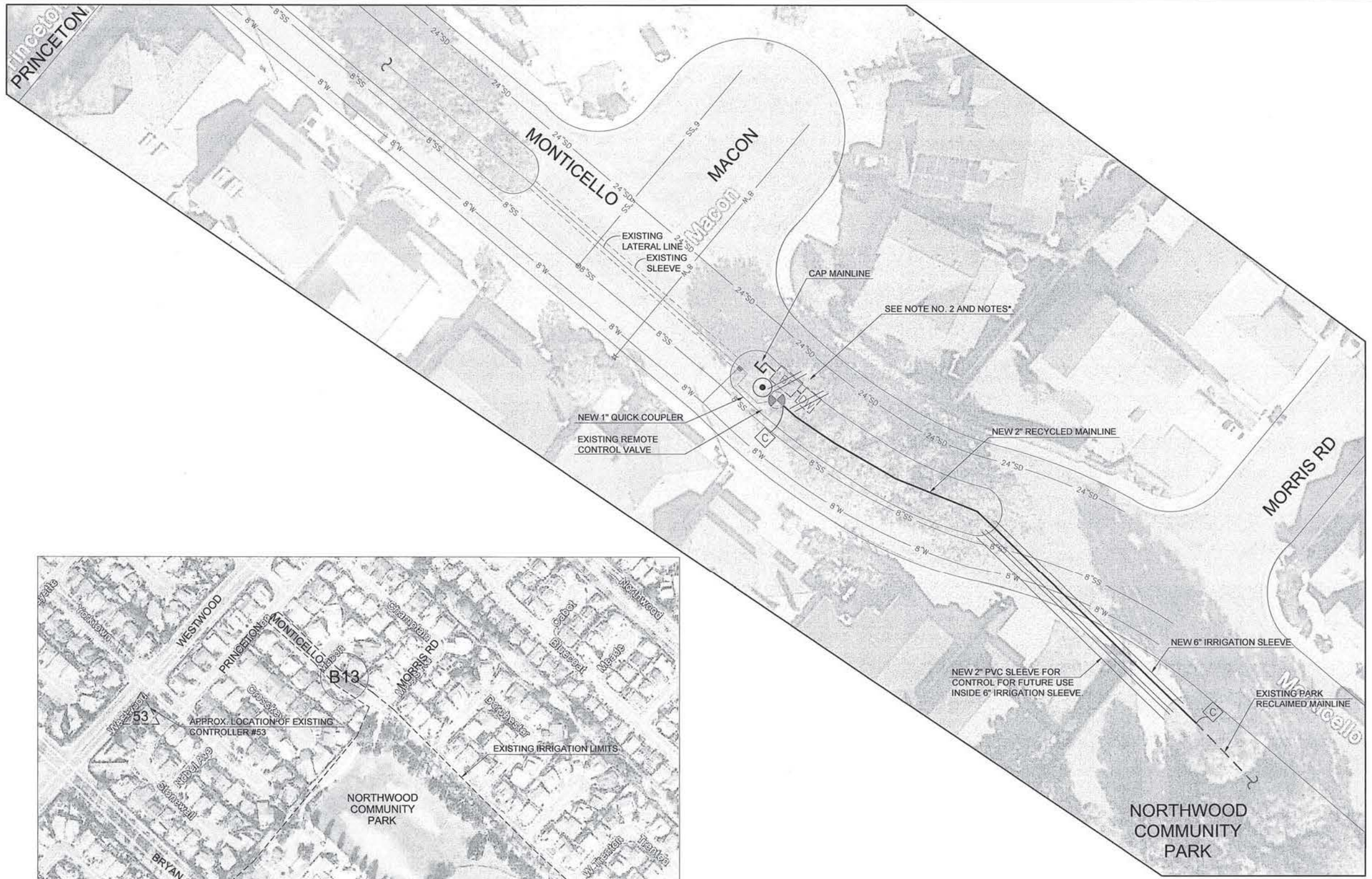
RECYCLED WATER METER INFORMATION	
ADDRESS:	NORTHWOOD COMMUNITY PARK ON YALE AVE
CIVIL STA. #:	N/A
MAX. G.P.M.	100
METER SIZE	1.5"
AREA SERVED	665,050 SQFT
EST. ANNUAL WATER USE	17,866 ccf
STATIC PRESSURE	80 PSI
DESIGN PRESSURE	75 PSI

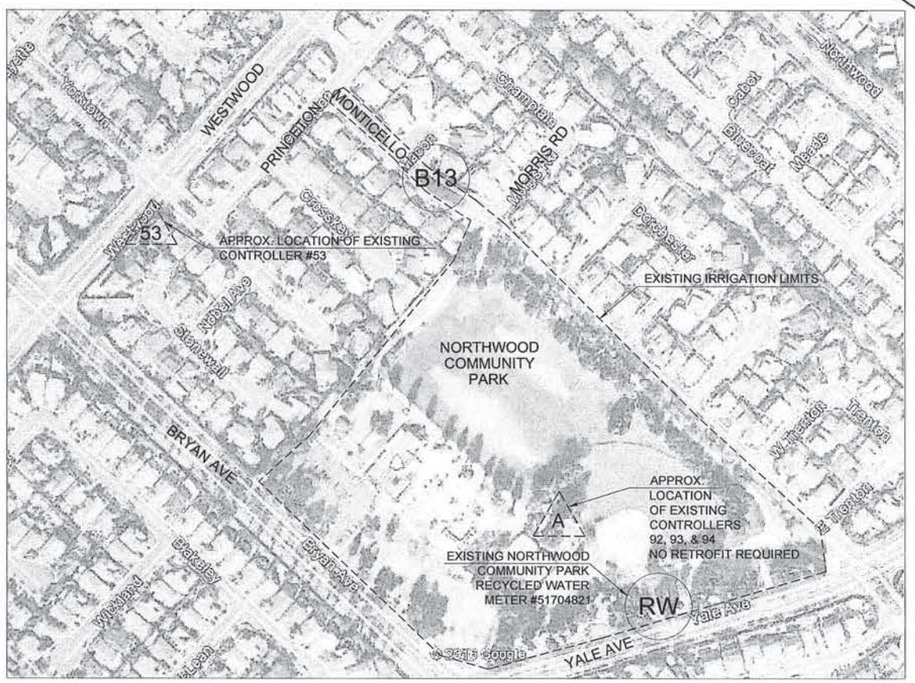
APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17





VICINITY MAP
NORTHWOOD COMMUNITY PARK
NTS

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC
CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:
LICENSED LANDSCAPE ARCHITECT — Reserved — 01-06-17 — STATE OF CALIFORNIA
2033 01-06-2017
LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE
RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION

B13 - MONTICELLO AVE

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 14 OF 30

SHEET REVISED: 8/15/07

IRRIGATION NOTES: (THIS SHEET ONLY)

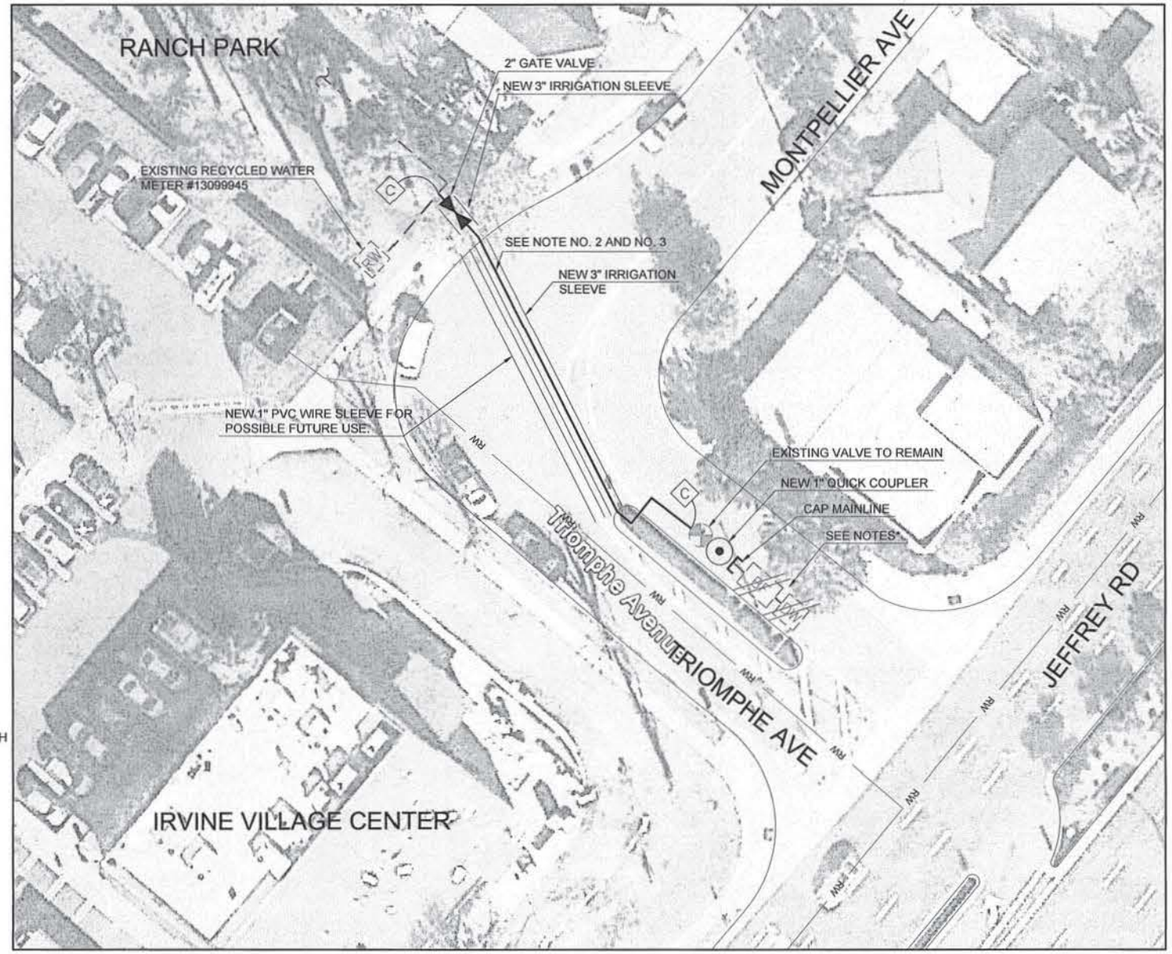
1. SEE GENERAL IRRIGATION NOTES ON SHEET 23 AND IRRIGATION LEGEND ON SHEET 26.
2. CONTRACTOR SHALL DISCONNECT THE EXISTING POTABLE SYSTEM AND CAP THE EXISTING MAIN LINE. CONTRACTOR SHALL CONNECT THE EXISTING MEDIAN IRRIGATION SYSTEM AND BACKFEED TO THE RECYCLED WATER IRRIGATION SYSTEM CURRENTLY IRRIGATING RANCH PARK.
3. CONTRACTOR SHALL BACKFEED THIS IRRIGATION SYSTEM. CONTRACTOR SHALL ADD SLEEVE UNDER TRIOMPHE AVENUE AND CONNECT TO THE CLOSEST EXISTING IRRIGATION SYSTEM IN RANCH PARK.
4. CONTRACTOR SHALL CONNECT AND TEST ALL EXISTING VALVE STATIONS TO THE EXISTING CONTROLLER. CONTRACTOR SHALL MAKE SURE ALL VALVE STATIONS ARE OPERATIONAL BY TESTING EACH VALVE MANUALLY AND AUTOMATICALLY. IF A VALVE IS NOT OPERATIONAL, THEN THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER TROUBLESHOOTING AND DETERMINING THE PROBLEM.

* PRIOR TO PROCEEDING TO CONVERT EACH OF THE DOMESTIC WATER METERS NOTED ON THIS PLAN, THE FOLLOWING STEPS MUST BE FOLLOWED:

5. CITY OF IRVINE REPRESENTATIVE MUST COMPLETE THE METER APPLICATION PROCESS FOR NEW RW WATER METER(S) AT IRWD OFFICES.
6. IRWD OR REPRESENTATIVE PERFORMS AN ON-SITE IRRIGATION SYSTEM EVALUATION AND INVESTIGATION WITH THE CITY LANDSCAPE MAINTENANCE CONTRACTOR.
7. IRWD OR REPRESENTATIVE PERFORMS PRELIMINARY CROSS CONNECTION TEST ON THE IRRIGATION SYSTEM.
8. CONTRACTOR IDENTIFIES THE SITE AS USING RW (SIGNS, TAGS, LIDS, STICKERS, ETC.).
9. CONTRACTOR ADJUSTS THE ENTIRE IRRIGATION SYSTEM TO PREVENT RUN OFF AND OVERSPRAY, MAKES ADJUSTMENTS AS NEEDED.
10. IRWD REMOVES THE POTABLE WATER METER.
11. CONTRACTOR REMOVES RP BACKFLOW AND CAPS THE LINE. REMOVED RP DEVICE TO BE RETURNED TO PUBLIC WORK'S LANDSCAPE DIVISION.
12. AFTER REMOVAL OF WATER METER AND BACKFLOW PREVENTER, CONTRACTOR SHALL BACKFILL AND REPLACE THE BARE AREA WITH PLANTING TO MATCH EXISTING SURROUNDING LANDSCAPE.
13. CONTRACTOR INSTALLS P.O.C. ASSEMBLY DOWNSTREAM OF FUTURE RECYCLED WATER METER LOCATION.
14. IRWD OR REPRESENTATIVE RELEASES AND INSTALLS THE NEW RECYCLED WATER METER.
15. IRWD OR REPRESENTATIVE AUTHORIZES CITY CONTRACTOR TO CONNECT THE IRRIGATION SYSTEM TO THE NEW RW IRRIGATION METER.

B15 - EXISTING DOMESTIC WATER METER #13099945

RECYCLED WATER METER INFORMATION	
ADDRESS:	TRIOMPHE AVE
CIVIL STA. #:	N/A
MAX. G.P.M.	50
METER SIZE	1"
AREA SERVED	266,230 SQFT
EST. ANNUAL WATER USE	7,451 ccf
STATIC PRESSURE	45 PSI
DESIGN PRESSURE	40 PSI





VICINITY MAP
RANCH PARK
NTS

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8/30/17

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — DAVID P. TAYBRON — Renewal 8-31-18 — 03-06-17 — STATE OF CALIFORNIA

2033 01-06-2017
LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION

B15 - TRIOMPHE AVE

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

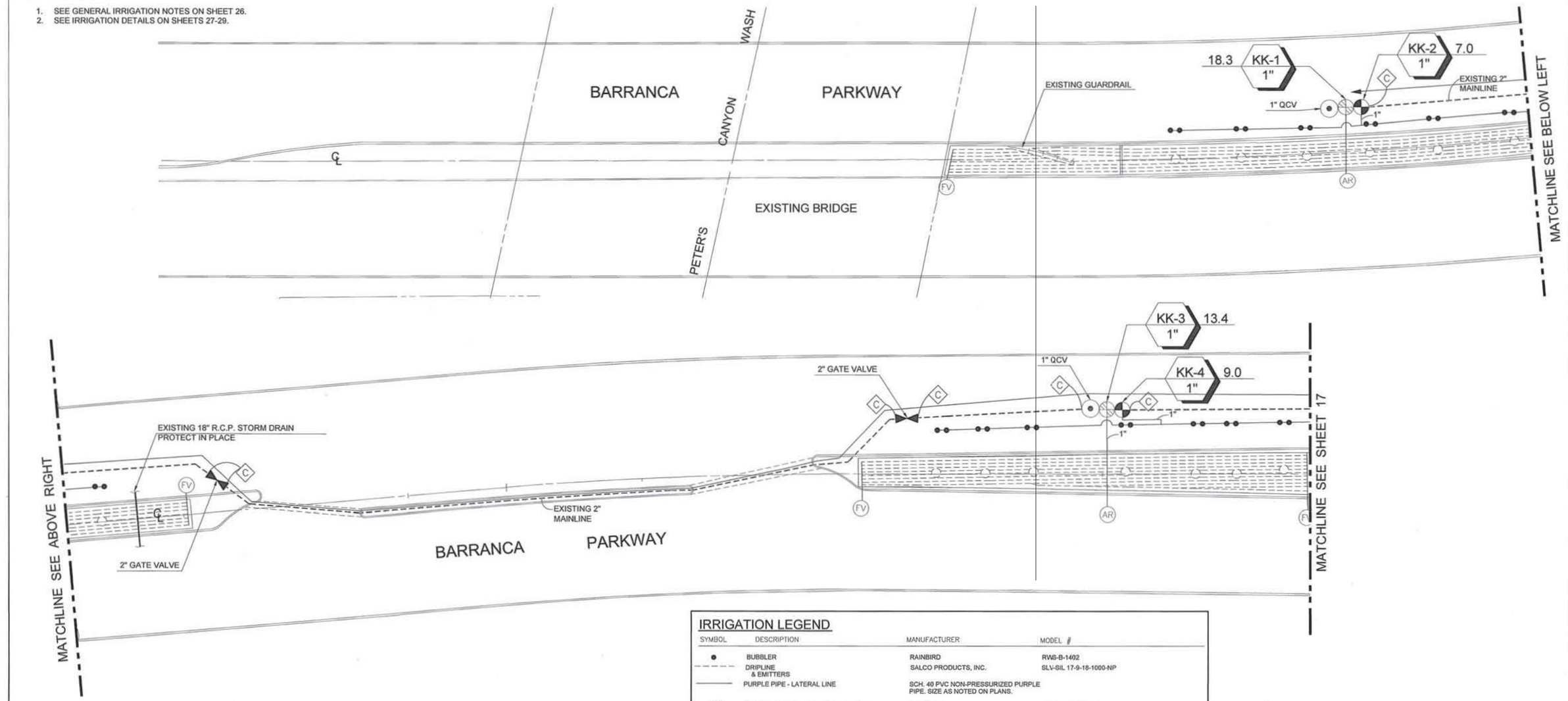
SHEET 15 OF 30

PATH =
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SHEET REVISED: 8/15/07

IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
●	BUBBLER	RAINBIRD	RWS-B-1402
- - - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7845 (1") (PURPLE CAP)
	EXISTING BASKET STRAINER	--	--
	EXISTING MASTER VALVE	--	--
	EXISTING PRESSURE REGULATOR	--	--
	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 ½")
FI	FERTILIZING SYSTEM	EZ-FLO	EZ803-CX
	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
C	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
	CONTROL WIRES	DIRECT BURIAL	--
	EXISTING MAINLINE	--	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17

Scale: 0' 10' 20' 40'

PLAN CHECK NO. 0D687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — LLOYD R. TAYLOR — Revised 9-21-16 Revised 9-30-16 01-06-17 — STATE OF CALIFORNIA

2033 — LANDSCAPE ARCHITECT — LICENSE NO. — 01-06-2017 — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)

BARRANCA PARKWAY - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

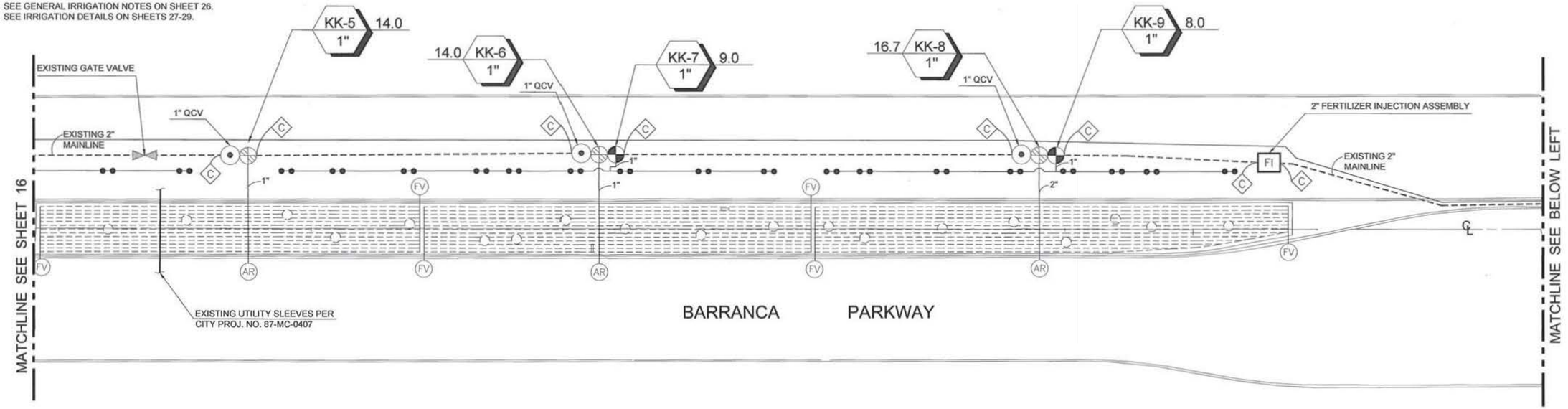
PROJECT NO.

SHEET 16 OF 30

SHEET REVISED: 8/15/07

IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
●	BUBBLER	RAINBIRD	RWS-B-1402
- - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
	EXISTING BASKET STRAINER	--	--
	EXISTING MASTER VALVE	--	--
	EXISTING PRESSURE REGULATOR	--	--
FS	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 ½")
FI	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX
	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
	CONTROL WIRES	DIRECT BURIAL	--
	EXISTING MAINLINE	--	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3757

ONSITE APPROVAL: _____ DATE: 8-30-17

0' 10' 20' 40'

Scale

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA

Signature 8-31-18 Renewal Date

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

		DATE
DRAWN BY:		
DESIGNED BY:		
CHECKED BY:		
RECOMMENDED BY:		

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)

BARRANCA PARKWAY - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

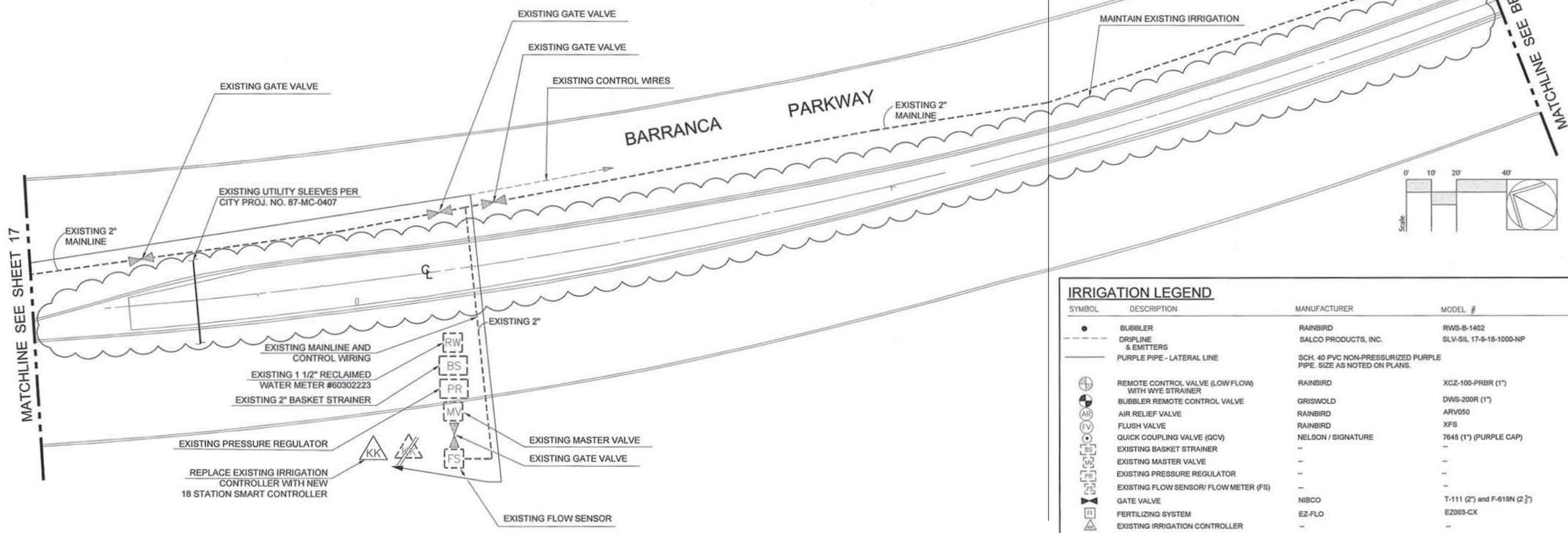
SHEET 17 OF 30

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SHEET REVISED: 8/15/07

IRRIGATION NOTES:

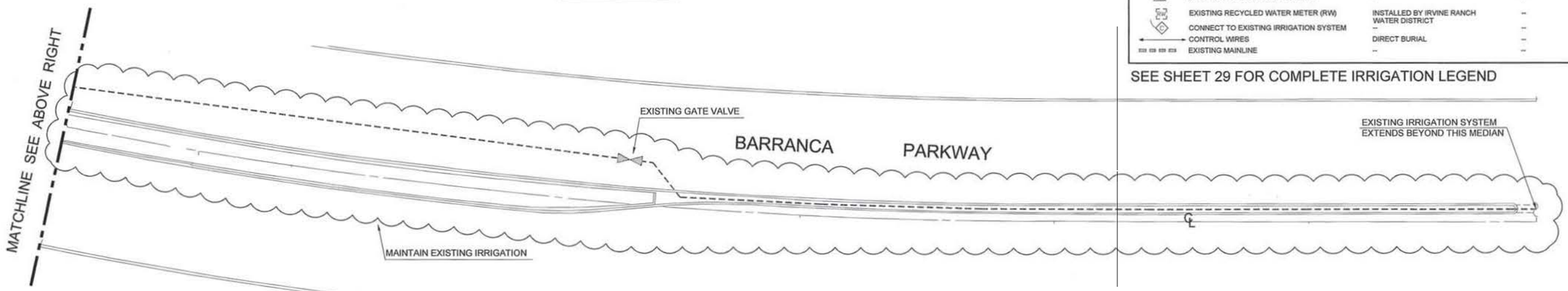
1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
●	BUBBLER	RAINBIRD	RWS-B-1402
- - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
MV	EXISTING MASTER VALVE	--	--
PR	EXISTING PRESSURE REGULATOR	--	--
FS	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2½")
F	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX
	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
←→	CONTROL WIRES	DIRECT BURIAL	--
= = = =	EXISTING MAINLINE	--	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND



APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17

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PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT — Daniel Rosenthal — Exp. 01-31-18 — Exp. 01-26-12 — STATE OF CALIFORNIA

2033 — 01-06-2017

LANDSCAPE ARCHITECT — LICENSE NO. — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
BARRANCA PARKWAY - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

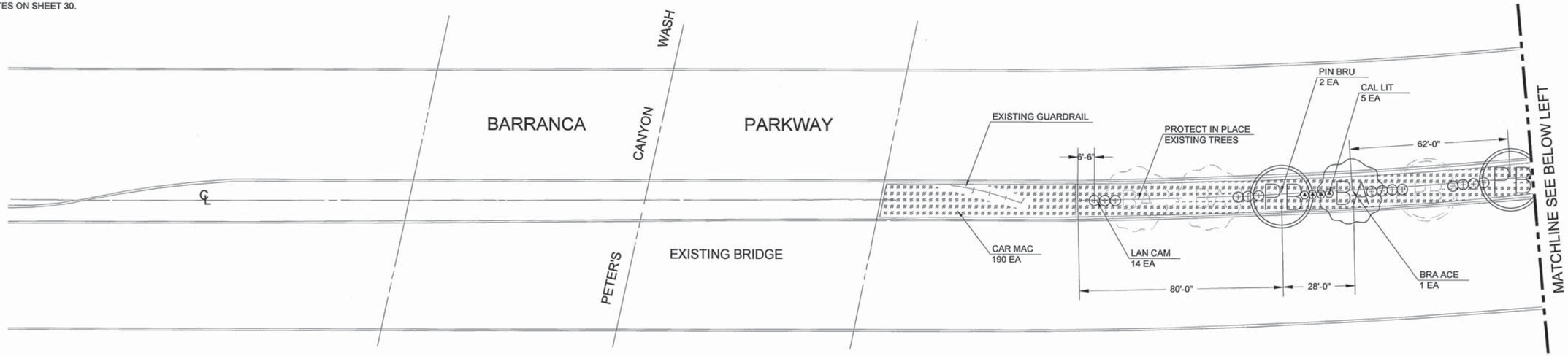
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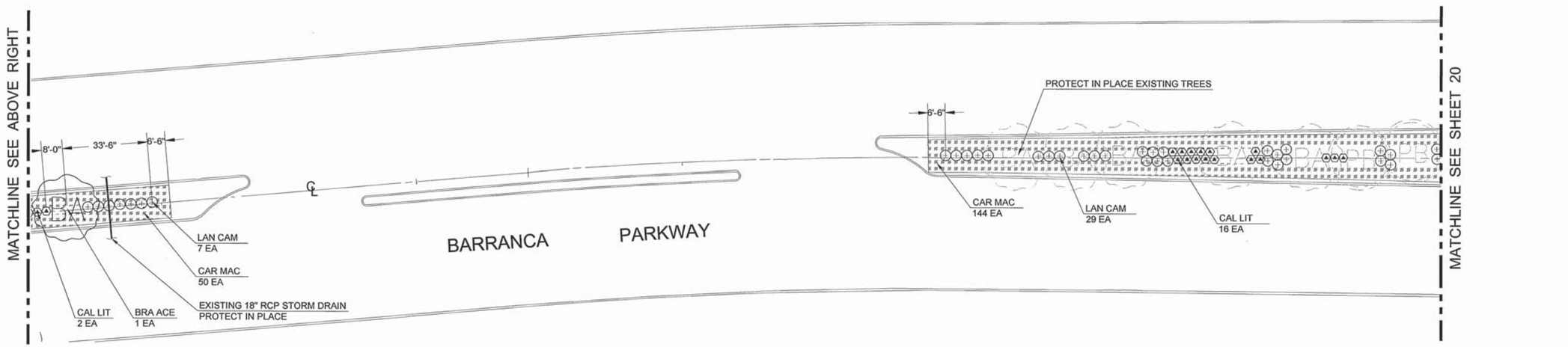
SHEET 18 OF 30

SHEET REVISED: 8/15/07

PLANTING NOTE:

SEE GENERAL PLANTING NOTES ON SHEET 30.





PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
BA	BRACHYCHITON ACERIFOLIUS	FLAME TREE	24" BOX	42	SEE CITY STD PLAN NO. 606 ON SHT 30.
PB	PINUS BRUTIA	AFGHAN PINE	24" BOX	2	SEE CITY STD PLAN NO. 606 ON SHT 30.
	CALLISTEMON 'LITTLE JOHN'	DWARF BOTTLEBRUSH	5 GAL	23	SEE CITY STD PLAN NO. 601 ON SHT 30.
	LANTANA CAMARA X 'NEW GOLD'	NEW GOLD LANTANA	5 GAL	50	SEE CITY STD PLAN NO. 601 ON SHT 30.
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	384	SEE CITY STD PLAN NO. 609 ON SHT 30.

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — Signature — Expiration Date 01-06-17 — STATE OF CALIFORNIA

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:		DATE
DESIGNED BY:		DATE
CHECKED BY:		DATE
RECOMMENDED BY:		DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
BARRANCA PARKWAY - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

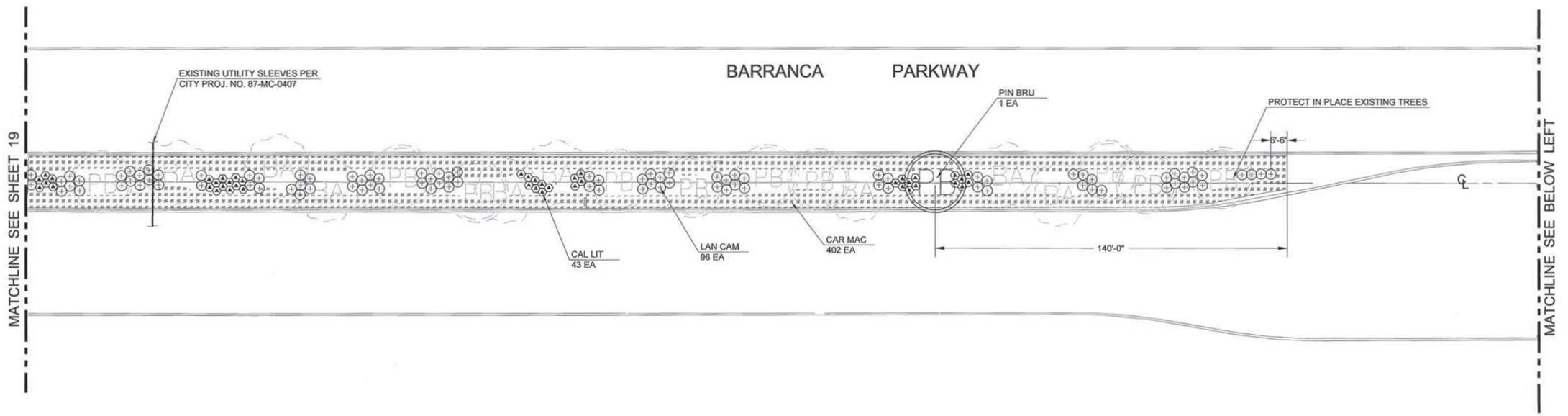
SHEET 19 OF 30

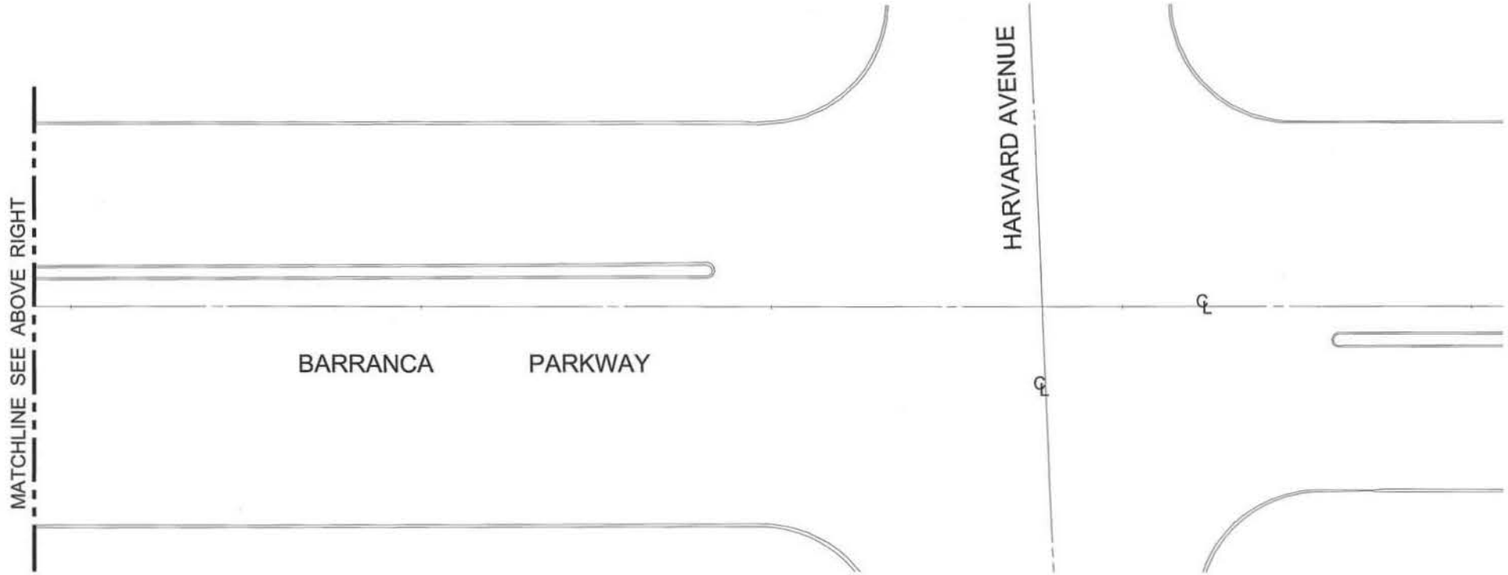
SHEET REVISED: 8/15/07

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PLANTING NOTE:

SEE GENERAL PLANTING NOTES ON SHEET 30.





PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
PB	PINUS BRUTIA	AFGHAN PINE	24" BOX	1	SEE CITY STD PLAN NO. 606 ON SHT30.
	CALLISTEMON 'LITTLE JOHN'	DWARF BOTTLEBRUSH	5 GAL	43	SEE CITY STD PLAN NO. 601 ON SHT 30.
	LANTANA CAMARA X 'NEW GOLD'	NEW GOLD LANTANA	5 GAL	96	SEE CITY STD PLAN NO. 601 ON SHT 30.
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	402	SEE CITY STD PLAN NO. 609 ON SHT 30.

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — Ralph Dale Pierce — No. 2033 — Exp. 08-31-18 — 01-06-12 — STATE OF CALIFORNIA

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
BARRANCA PARKWAY - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

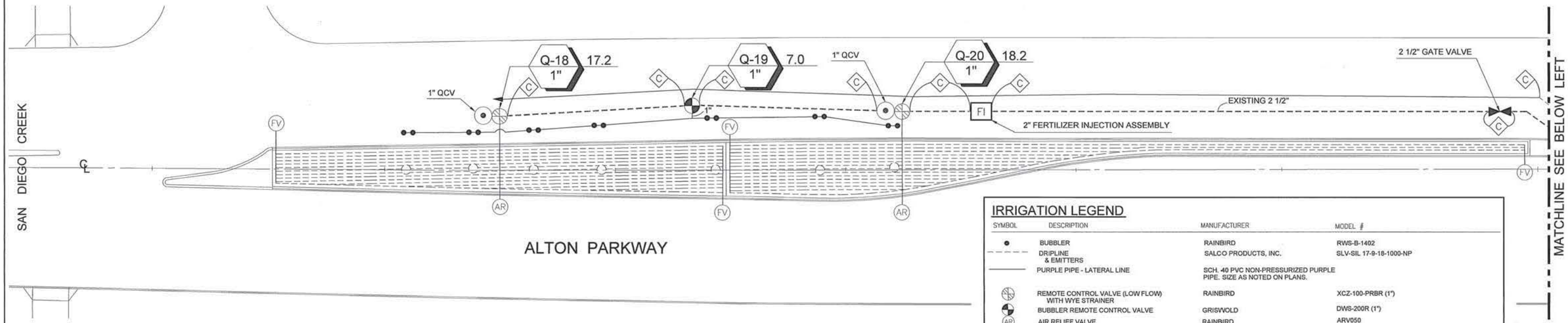
SHEET 20 OF **30**

SHEET REVISED: 8/15/07

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IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
•	BUBBLER	RAINBIRD	RWS-B-1402
- - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
	EXISTING MASTER VALVE	--	--
PR	EXISTING PRESSURE REGULATOR	--	--
FS	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 1/2")
FI	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX
Q	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
C	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
←→	CONTROL WIRES	DIRECT BURIAL	--
= = = =	EXISTING MAINLINE	--	--

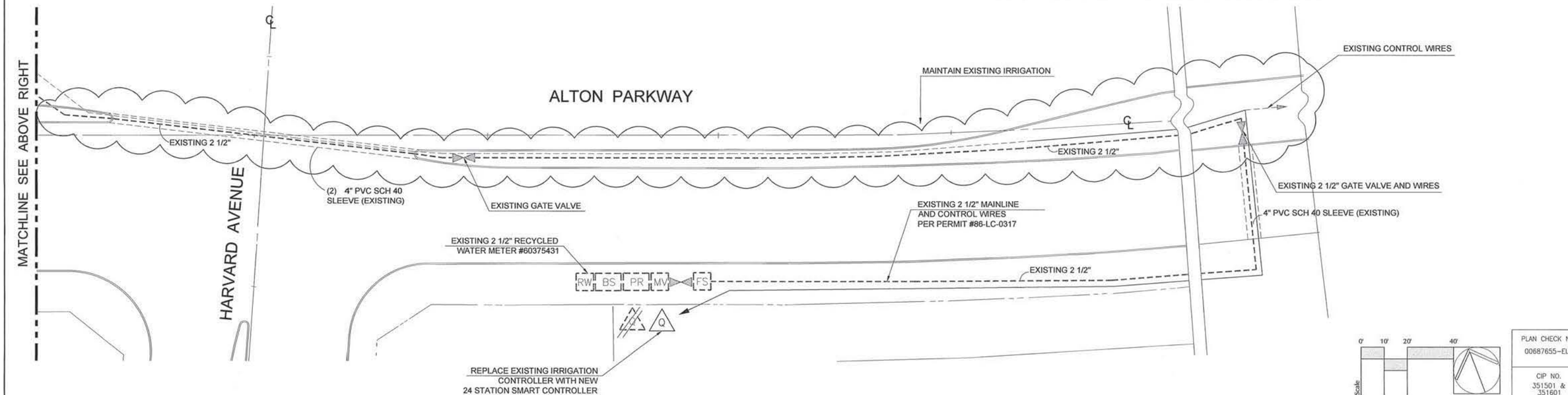
SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK # : 3759

ONSITE APPROVAL: _____ DATE: 8-30-17



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Signature — 6-21-18 — Renewal Date 01-06-17 — 2033

LANDSCAPE ARCHITECT — LICENSE NO. — 01-06-2017 DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
ALTON PARKWAY - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

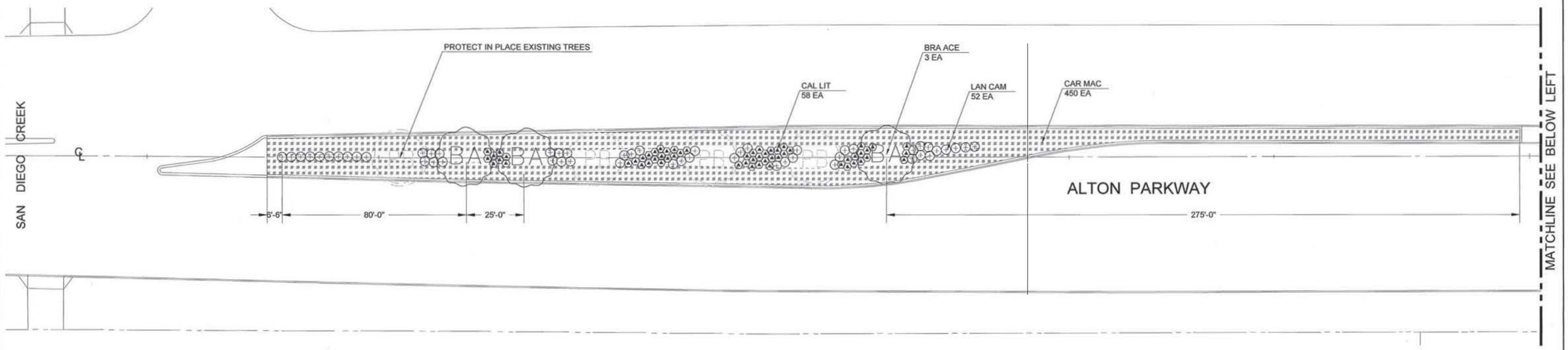
SHEET 21 OF 30

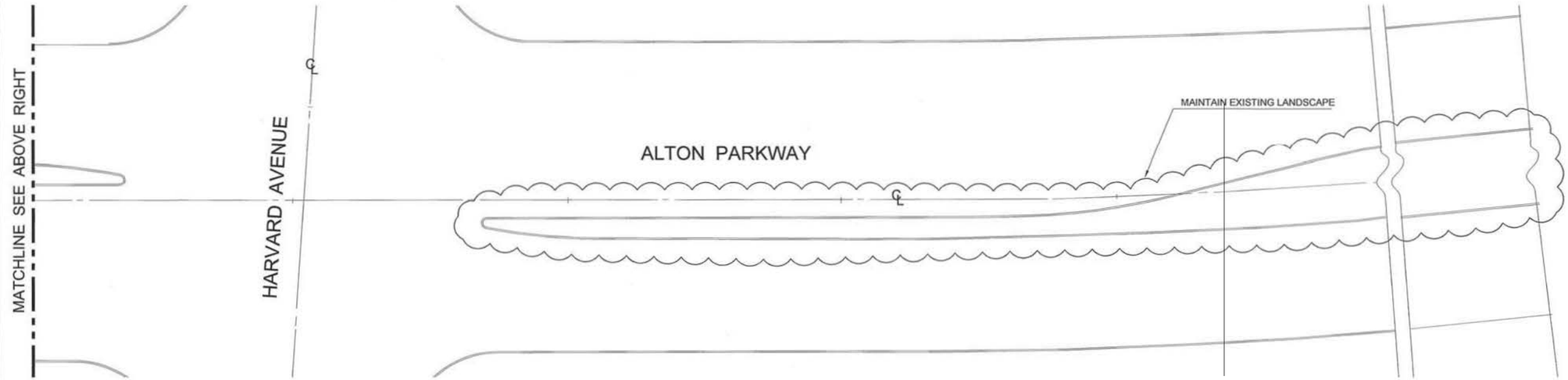
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SHEET REVISED: 8/15/07

PLANTING NOTE:

SEE GENERAL PLANTING NOTES ON SHEET 30.





PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
BA	BRACHYCHITON ACERIFOLIUS	FLAME TREE	24" BOX	3	SEE CITY STD PLAN NO. 606 ON SHT 30.
	CALLISTEMON 'LITTLE JOHN'	DWARF BOTTLEBRUSH	5 GAL	58	SEE CITY STD PLAN NO. 601 ON SHT 30.
	LANTANA CAMARA X 'NEW GOLD'	NEW GOLD LANTANA	5 GAL	52	SEE CITY STD PLAN NO. 601 ON SHT 30.
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	450	SEE CITY STD PLAN NO. 609 ON SHT 30.

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Signature — Date 01-31-18 — Renewal Date 01-06-17 — 2033 — 01-06-2017

LANDSCAPE ARCHITECT — LICENSE NO. — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
ALTON PARKWAY - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

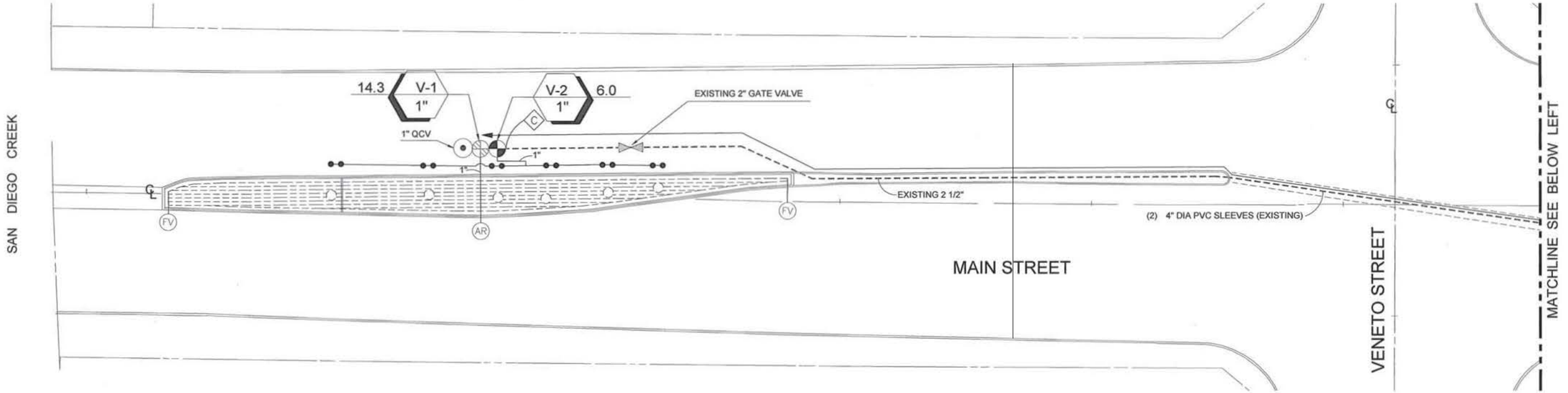
SHEET 22 OF 30

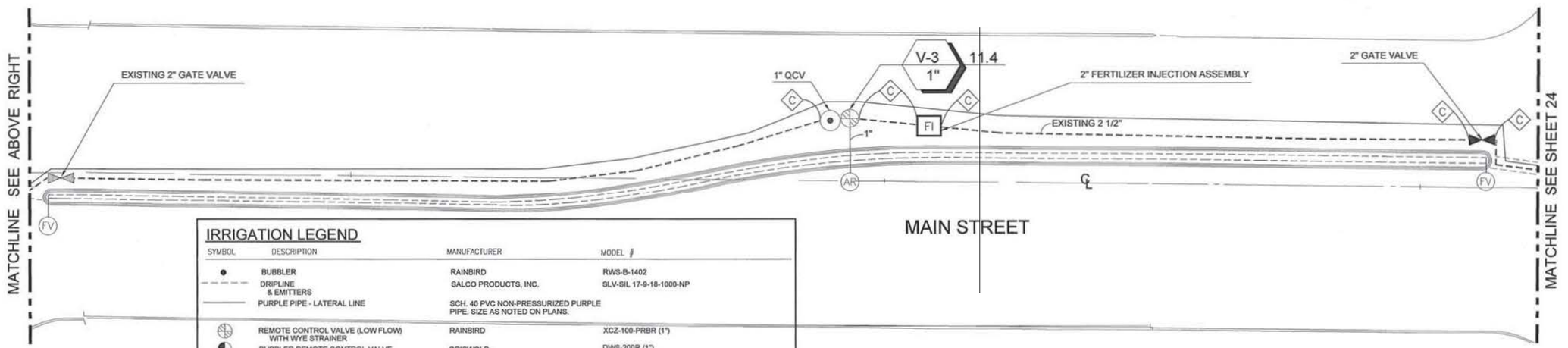
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SHEET REVISED: 8/15/07

IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.





IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
●	BUBBLER	RAINBIRD	RWS-B-1402
- - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
MV	EXISTING MASTER VALVE	--	--
PR	EXISTING PRESSURE REGULATOR	--	--
FS	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 ½")
FI	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX
	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
C	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
	CONTROL WIRES	DIRECT BURIAL	--
	EXISTING MAINLINE	--	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3754

ONSITE APPROVAL: _____ DATE: 8-30-17

0' 10' 20' 40'
Scale

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

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PLAN PREPARED BY:

RICHARD LANDSCAPE ARCHITECTS — STEVEN M. RICHARD — Member — 6-30-18 — 01-06-17 — STATE OF CALIFORNIA

2033 — 01-06-2017

LANDSCAPE ARCHITECT — LICENSE NO. — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
MAIN ST - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 23 OF 30

SHEET REVISED: 8/15/07

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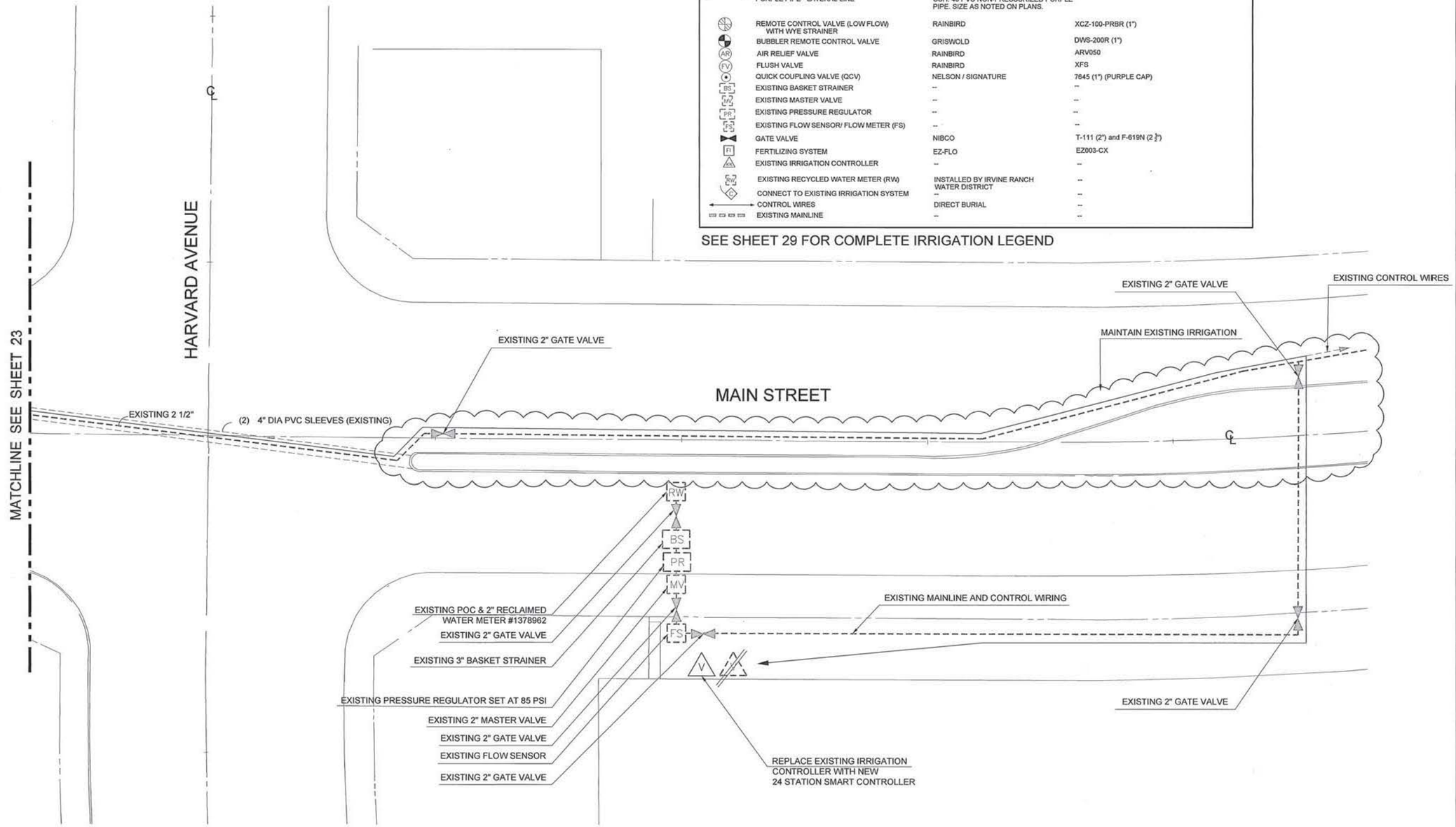
IRRIGATION NOTES:

1. SEE GENERAL IRRIGATION NOTES ON SHEET 26.
2. SEE IRRIGATION DETAILS ON SHEETS 27-29.

IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #
●	BUBBLER	RAINBIRD	RWS-B-1402
- - - -	DRIPLINE & EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.	
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	XCZ-100-PRBR (1")
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")
AR	AIR RELIEF VALVE	RAINBIRD	ARV050
FV	FLUSH VALVE	RAINBIRD	XFS
	QUICK COUPLING VALVE (QCV)	NELSON / SIGNATURE	7645 (1") (PURPLE CAP)
BS	EXISTING BASKET STRAINER	--	--
MV	EXISTING MASTER VALVE	--	--
PR	EXISTING PRESSURE REGULATOR	--	--
FS	EXISTING FLOW SENSOR/ FLOW METER (FS)	--	--
	GATE VALVE	NIBCO	T-111 (2") and F-619N (2 1/2")
FT	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX
C	EXISTING IRRIGATION CONTROLLER	--	--
RW	EXISTING RECYCLED WATER METER (RW)	INSTALLED BY IRVINE RANCH WATER DISTRICT	--
C	CONNECT TO EXISTING IRRIGATION SYSTEM	--	--
←→	CONTROL WIRES	DIRECT BURIAL	--
- - - -	EXISTING MAINLINE	--	--

SEE SHEET 29 FOR COMPLETE IRRIGATION LEGEND



APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3754

ONSITE APPROVAL: _____ DATE: 8-30-17

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655--ELC

CIP NO. 351501 & 351601

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PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT — Hanrahan 6-30-18 Renewal Date 01-06-17 — STATE OF CALIFORNIA

LANDSCAPE ARCHITECT 2033 LICENSE NO. 01-06-2017 DATE

DRAWN BY: DATE

DESIGNED BY: DATE

CHECKED BY: DATE

RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION (NOT PART OF CONVERSIONS)

MAIN ST - IRRIGATION PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO. -

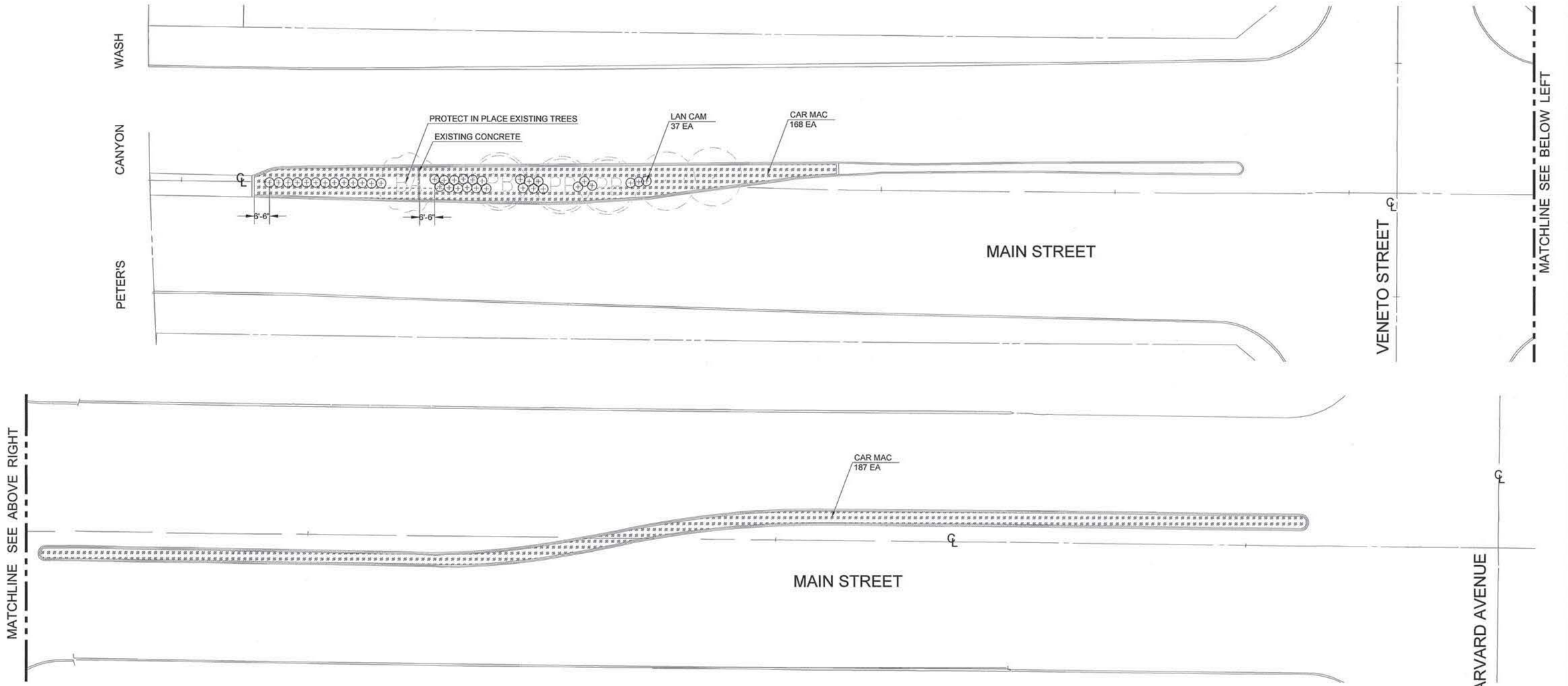
SHEET 24 OF 30

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SHEET REVISED: 8/15/07

PLANTING NOTE:

SEE GENERAL PLANTING NOTES ON SHEET 30.



PLANTING LEGEND					
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
⊕	LANTANA CAMARA X 'NEW GOLD'	NEW GOLD LANTANA	5 GAL	37	SEE CITY STD PLAN NO. 601 ON SHT 30.
	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	168	SEE CITY STD PLAN NO. 609 ON SHT 30.

Scale 0' 10' 20' 40'

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

SHEET 25 OF 30

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — Lloyd R. Fahrion, No. 2033 — Signature — Renewal Date 01-06-17 — STATE OF CALIFORNIA

2033 01-06-2017

LANDSCAPE ARCHITECT LICENSE NO. DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)

MAIN ST - PLANTING PLANS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

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SHEET REVISED: 8/15/07

REQUIREMENTS FOR RETROFIT OF POTABLE IRRIGATION SYSTEMS TO RECYCLED WATER

1. Landscape maintenance contractor performs coverage test walk-through on each irrigation system with IRWD On-Site Systems Specialist.
2. Contractor "tunes up" system, repairs sprinklers, etc., to eliminate overspray, runoff, misting of heads, etc.
3. Contractor adds a Quick Coupler, strainer (30 mesh screen or finer), and pressure regulator downstream of each new recycled water meter (see attached specifications).
4. Contractor replaces or retrofits existing quick coupling valves with approved purple-cover models (see accompanying specification); no hose bibs are allowed to remain on irrigation system.
5. Contractor tags all remote control valves with approved purple warning tags (see accompanying specifications).
6. Contractor "labels" all remote control valve box lids with approved purple warning labels (see attached specifications).
7. Contractor meets with IRWD On-Site Systems Specialist to show that all system adjustments, repairs, etc., and recycled water identification changes have been made (purple valve tags, etc.)
8. IRWD On-Site Systems Specialist coordinates the following with the owner's contractor for actual conversion of each system:
   a. Install a reduced pressure principle backflow prevention assembly on any domestic service to the premises (such as drinking fountain supply, recreation area bathroom supply, laundry room supply, maintenance area or car wash supply). Consult IRWD On-Site Specialist for details.
   b. Remove irrigation system backflow preventor.
   c. Disconnect irrigation system from potable water.
   d. Connect system to recycled water meter (including installation of quick coupler, strainer, and PSI regulator mentioned above).

STRAINERS, PRESSURE REDUCING VALVES AND VALVE TAGS

A. Strainers

Sprinkler irrigation systems shall have a "Y" or basket strainer located downstream of the meter. The strainer shall have a 30 mesh or finer screen. Strainers that have automatic backwash features will not normally be allowed unless it can be demonstrated to the District that the backwash water will not cause runoff and is disposed of in a manner approved by the District. The strainer drain valve shall operate with a recessed key slot.

B. Pressure Reducing Valves

A pressure reducing valve must be installed downstream of the strainer for each system using recycled water, unless otherwise directed by the District.

C. Strainer and P.R.V. Boxes

All strainers and pressure reducing valves shall be installed below grade in a rectangular box of sufficient size to easily allow repair or replacement of the unit(s).

D. Valve Tags

All recycled water sprinkler control valves shall be tagged with identification tags.

(a) Tags shall be weatherproof plastic, 3" x 4", purple in color with the words **"WARNING – RECLAIMED WATER – DO NOT DRINK"** imprinted on one side, and **"AVISA – AGUA IMPURA – NO TOMAR"** on the other side. Imprinting shall be permanent and black in color. Use tags as manufactured by T. Christy enterprises or approved equal.

(b) One tag shall be attached to each valve as follows:

(1) Attach to valve stem directly or with plastic tie-wrap or

(2) Attach to solenoid wire directly or with plastic tie-wrap or

(3) Attach to valve cover with existing valve cover bolt.

IRVINE RANCH WATER DISTRICT QUICK COUPLING VALVE SPECIFICATIONS

A. Recycled Water

Quick coupling valves used in recycled water systems shall conform to the following:

1. Quick coupling valves shall be constructed of brass with a PURPLE rubber or vinyl cover, and shall have a ¾- or 1-inch inlet.
2. The cover shall have a warning with the following information:
   a. "NON-POTABLE" or "RECYCLED WATER".
   b. "DO NOT DRINK" in English AND Spanish.
   c. The international "DO NOT DRINK" symbol – a glass of water with a slash through it.
3. The warning shall be permanently stamped or molded into the cover.
4. Locking covers may be required.

GENERAL IRRIGATION NOTES

1. THE DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE. THE CONTRACTOR SHALL LOCATE ALL VALVES IN SHRUB AREAS CLOSE TO CURBS OR WALKWAYS.
2. THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, TOOLS, MACHINERY, AND EQUIPMENT NECESSARY TO COMPLETE SPRINKLER SYSTEM AND ADJUSTMENT, INCLUDING TRENCHING, BACKFILLING, ETC.
3. THE IRRIGATION CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, STRUCTURES AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
4. CONTRACTOR SHALL VERIFY POINTS OF CONNECTION ON SITE.
5. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO INDICATE A COMPLETE SPRINKLER SYSTEM INSTALLED AND READY FOR USE WITHOUT FURTHER COST TO THE CITY.
6. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY'S AUTHORIZED REPRESENTATIVE IMMEDIATELY UPON DISCOVERY. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
7. ALL MATERIAL REQUIRED FOR THE PROJECT SHALL BE AS DIRECTED IN THE SPECIFICATIONS AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION AND PER CITY STANDARD AND LANDSCAPE DESIGN MANUAL.
8. INSTALLATION SHALL BE PER CITY AND COUNTY CODES, NORMAL APPROVED STANDARDS OF PROCEDURE AND MANUFACTURERS' SPECIFICATIONS.
9. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO LOCAL BUILDING AND PLUMBING CODES HAVING JURISDICTION.
10. REFER TO SPECIFICATIONS FOR STANDARDS OF MATERIALS AND WORKMANSHIP.
11. THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, TOOLS, MACHINERY, AND EQUIPMENT NECESSARY TO COMPLETE IRRIGATION SYSTEM AND ADJUSTMENT, INCLUDING TRENCHING, BACKFILLING, ETC.
12. THE FINAL LOCATION AND EXACT POSITIONING OF THE AUTOMATIC IRRIGATION CONTROLLERS SHALL BE APPROVED BY THE CITY'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
13. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
14. COORDINATE THE INSTALLATION OF ALL SPRINKLER MATERIALS, INCLUDING PIPE, WITH ANY EXISTING LANDSCAPING TO AVOID INTERFERING WITH THE TREES, SHRUBS, OR OTHER PLANTING.
15. CONTRACTOR SHALL APPLY AND PAY FOR ALL PERMITS REQUIRED FOR THIS PORTION OF THE WORK.
16. ALL MAIN LINE PIPING AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES. MAIN LINE SLEEVE SIZE SHALL BE A MINIMUM OF TWICE (2X) THE DIAMETER OF THE PIPE TO BE SLEEVED. CONTROL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING.
17. ALL LATERAL LINE PIPING UNDER PAVING SHALL BE PVC SCHEDULE 40 PIPE AND SHALL BE INSTALLED PRIOR TO PAVING.
18. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT BY THE CITY'S AUTHORIZED REPRESENTATIVE TIME OF SAID REJECTION.
19. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM PERFORMANCE AND COVERAGE WITH MINIMAL OVER-SPRAY ONTO WALKS, ROADWAYS, BUILDINGS, WALLS, ETC. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
20. CONTRACTOR SHALL INSTALL CHECK VALVES WHERE NECESSARY TO PREVENT ANY LOW HEAD DRAINAGE.
21. PROVIDE PVC SCHEDULE 40 CONDUITS FOR CONTROLLER WIRES WHEREVER CONNECTIONS BETWEEN ELECTRIC VALVES AND CONTROLLER PASS THROUGH OR UNDER MASONRY, PAVING, ETC.
22. THE INSTALLATION AND OPERATION OF THE SYSTEM MUST BE COMPLETE AND FULLY OPERATIONAL PRIOR TO TURNING OVER TO CITY'S MAINTENANCE PERSONNEL.
23. UPON COMPLETION OF THE WORK, REMOVE ALL EXCESS MATERIALS, EQUIPMENT AND WASTE.
24. THE IRRIGATION CONTRACTOR SHALL GUARANTEE THE ENTIRE IRRIGATION SYSTEM AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A MAINTENANCE PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY CITY. SHOULD ANY REPAIRS BE NECESSARY DURING THE MAINTENANCE PERIOD DUE TO DEFECTIVE MATERIALS OR WORKMANSHIP, CONTRACTOR SHALL REPAIR AT HIS OWN EXPENSE.

GENERAL IRRIGATION NOTES (cont.)

25. CONTRACTOR SHALL INSTALL ONE (1) RECYCLED WATER WARNING SIGN AT THE POINT OF CONNECTION AND ONE (1) FOR LANDSCAPE PARKWAY AND MEDIANS THAT IS 1,500 LF OR SHORTER. INSTALL TWO (2) ONE AT EACH END OF THE IRRIGATION SYSTEM BEING WATERED BY RECYCLED WATER FOR LANDSCAPE PARKWAY AND MEDIANS LONGER THAN 1,500 LF.
26. CONTRACTOR SHALL INSTALL WARNING LABELS ON ALL IRRIGATION VALVE COVERS. LABELS SHALL BE PERMANENTLY MOLDED INTO OR AFFIXED ONTO THE LID WITH RIVETS, BOLTS, ETC. WARNING LABELS SHALL BE CONSTRUCTED OF WEATHERPROOF MATERIAL WITH THE WARNING PERMANENTLY STAMPED OR MOLDED INTO THE LABEL. THE WARNING SHALL CONTAIN THE FOLLOWING INFORMATION:
    a) "RECYCLED WATER"
    b) "DO NOT DRINK" IN ENGLISH AND SPANISH
    c) THE INTERNATIONAL "DO NOT DRINK" SYMBOL, SUCH AS A GLASS OF WATER WITH A SLASH THROUGH IT.
27. CONTRACTOR SHALL INSTALL RECYCLED WATER PURPLE VALVE TAGS ON ALL IRRIGATION REMOTE CONTROL VALVES, STRAINERS, PRESSURE REGULATORS, QUICK COUPLERS, AND ISOLATION VALVES.
28. CONTRACTOR SHALL REMOVE AND SALVAGE THE EXISTING BACKFLOW PREVENTER AND ENCLOSURE, AND EXISTING IRRIGATION CONTROLLER WITH THE BACKBOARD. SALVAGED IRRIGATION MATERIALS SHALL BE DELIVERED TO CITY OF IRVINE LANDSCAPE MAINTENANCE YARD. CONTRACTOR SHALL COORDINATE WITH CITY OF IRVINE REPRESENTATIVE.
29. CONTRACTOR SHALL VERIFY THAT THE POTABLE WATER METER TO BE CONVERTED TO RECYCLE WATER DOES NOT SERVICE ANY DRINKING FOUNTAINS OR SHARE WATERLINE WITH BUILDING PLUMBING. ANY DRINKING FOUNTAINS OR BUILDING PLUMBING SHALL MAINTAIN EXISTING POTABLE SYSTEM AND NEW RECYCLED WATER SYSTEM SHALL BE USED TO IRRIGATE LANDSCAPE IRRIGATION ONLY.
30. CONTRACTOR SHALL RETROFIT EXISTING IRRIGATION CONTROLLERS BY REPLACING THE CONTROLLER ASSEMBLY INCLUDING THE BACKBOARD WITH THE PROPOSED CONTROLLER WITH BACKBOARD. CONTRACTOR SHALL CONNECT BACK ALL POWER, COMMUNICATION, SENSORS, GROUND, AND VALVES WIRES BACK TO THE NEW CONTROLLER AND PERFORM A FUNCTIONAL TEST TO VERIFY ALL IRRIGATION VALVES ARE REMOTELY FUNCTIONAL. THE EXISTING IRRIGATION CONTROLLER CABINET AND PEDESTAL SHALL REMAIN AND BE RE-USED.
31. CONTRACTOR SHALL TURN ON ALL EXISTING VALVES AND ACKNOWLEDGE THE LIMITS OF THE LANDSCAPE. LIMITS SERVED BY THE CONTRACTOR PRIOR TO REMOVAL, AND REPLACEMENT WITH NEW CONTROLLER TO ENSURE ALL VALVES ARE CONNECTED BACK.
32. CONTRACTOR SHALL PROVIDE COMMON WIRES FROM RCV'S AND ALL NECESSARY WIRING FROM MASTER VALVES AND FLOW SENSORS BACK TO THE IRRIGATION CONTROLLER.

Irvine Ranch Water District

GUIDELINE FOR RECYCLED WATER USE

The following guidelines have been established by Irvine Ranch Water District in conjunction with the Orange County Health Department and the Santa Ana Regional Water Quality Control Board. They are to provide the basic parameters for the use of recycled water in landscape irrigation. To operate your system in compliance with these guidelines you must:

1. Irrigate between the hours of 9:00 p.m. to 6:00 am only. Watering outside this time Frame must be done manually with qualified supervisory personnel onsite. No system shall at any time be left unattended during use outside the normal schedule.
2. Irrigate in a manner that will minimize runoff , pooling and ponding. The Application rate shall not exceed the infiltration rate of the soil. Timers must be adjusted so as to be compatible with the lowest soil infiltration rate present. This procedure may be facilitated by the efficient scheduling of the automatic control clocks, (i.e., employing the repeat function to break up the total irrigation time into cycles that will promote maximum soil absorption).
3. Adjust spray heads to eliminate overspray onto areas not under the control of the customer For example, pool decks, private patios, streets and sidewalks.
4. Monitor and maintain the system to minimize equipment and material failure broken sprinkler heads, leaks, unreliable valves, etc., should be repaired as soon as they become apparent.
5. Educate all maintenance personnel, on a continuous basis, of the presence of recycled water, and the fact that it is not approved for drinking purposes. Given the high turnover rate of employees in the landscape industry, it is important that this information be disseminated on an almost daily basis. It is you, the landscape contractor, who is responsible for educating each and every one of your employees.
6. Obtain prior approval for all proposed changes and modifications to any onsite Facilities such changes must be submitted to, and approved by, the District Engineering office and designed in accordance with District standards.

Failure to comply with any or all of the above guidelines puts your system in violation to the District's Rules and Regulations, and will result in termination of service until the appropriate corrective steps have been taken.

Irvine Ranch Water District feels that the benefits to be derived from the successful application off recycled water merit the operating requirements that have been established. If you have any questions, or if we can be of any assistance, please do not hesitate to call our Irrigation Water Group at (949) 453-5300.

RWQCB REQUIRED INFO

a) The average number of people at this use site on a daily basis.
   100-200 people
b) Boundaries to the proposed use site, footprint of any facilities on the premises, drinking water fountains, and any recycled water or potable water impoundment to be used.
   See Plan Sheets 2 and 3 for boundaries
c) The person or persons responsible for the operation of the recycled water system at each use area.
   Ariel De La Paz (949) 724-7619
d) The specific use to be made of the recycled water at each use area.
   Landscape irrigation
e) The methods to be used to assure that the installation and operation of the recycled water system will not result in cross connections between the recycled water and the potable water piping systems. Describe the pressure test done before the installation of the meter.
   Initial cross-connection testing will be performed prior to conversion by IRWD staff. IRWD will perform ongoing inspection and testing as needed to meet the site type requirements.
f) Pipe locations of both recycled water and potable systems, or brief explanation for the exclusion of system not shown.
   See Plan Sheets 2 and 3 for boundaries

IRVINE RANCH WATER DISTRICT
Recycled and Potable Water Notes

The Following special on-site water notes are to be shown on all on-site water system construction plans:

A. The installation of the irrigation water system shall conform to the regulations for the construction of Irrigation water systems within the Irvine Ranch Water District (IRWD) and the accompanying plans And specifications.

B. All onsite recycled and potable water piping installed on this project shall be identified in accordance With IRWD's regulations and the irrigation specifications.

C. Recycled water piping shall be purple PVC manufactured for recycled water systems.

D. Marking on the purple PVC shall include the following:

Caution recycled water, nominal pipe size; PVC-1120; pressure rating in pounds per square inch at 73 degrees; ASTM designations such as 1785, 2241, 2672, 3139. Printing shall be placed continuously on two sides of the pipe.

E. All recycled water sprinkler box covers and control valves, isolation valves, quick couplers, and all Appurtenances shall be tagged with identification tags.

1. Tags shall be weatherproof plastic, 3" X 4", purple in color with the words "Warning Recycled Water – Do Not Drink" imprinted on one side, and "Aviso Agua Impura – No Tomar" on the Other side. Imprinting shall be permanent and black in color. Use tags as manufactured by T. Christy Enterprises or approved equal.
2. One tag shall be attached to each appurtenance as follow, or;

Identification shall be affixed to each irrigation valve lid cover and valve as follow:
(a) Identify valve cover with label or branded hot stamp that reads "Recycled Water Do Not Drink" or use purple cover with same identification.
(b) Attach tag to control valve stem directly or with plastic tie-wrap
(c) Attach tag to control valve solenoid wire directly or with plastic tie-wrap
(d) Attach to body of the relative appurtenance with a plastic tie-wrap

F. Warning tapes shall be used on all constant pressure main line piping carrying potable water.

G. Warning tapes shall be minimum of 3 inches wide and shall run continuously for the entire length Of the constant pressure main line piping. The tape shall be attached to the top of the pipe with plastic Tape banded around the warning tape and the pipe every 5 feet on center.

H. Warning tape for the constant pressure potable water piping shall be blue in color with the words "Caution Buried Waterline Below" imprinted on minimum 1 – inch high letters black in color. Imprinting shall be continuous and permanent.

I. IRWD shall be notified two days prior to the start of irrigation construction at (949) 453-5300 and Each work day thereafter until completion of project.

J. All pressure main line piping from the recycled water system shall be installed to maintain 10 feet Minimum horizontal separation from all potable water piping. Where recycled water and potable Water pressure main line piping cross, the recycled water piping shall be installed always below the Potable water piping in a class 200 purple PVC sleeve which extends a minimum of 5 feet on either Side of the potable water piping. Provide a minimum vertical distance of 6 inches. Conventional (white) PVC pipe may be used for sleeving material if it is taped with 3-inch wide purple warning tape which reads "Caution Recycled Water".

K. The irrigation system has been designed to operate between the hours of 9:00 pm to 6:00 am unless Otherwise directed by the district engineer.

L. All new common areas where recycled water is used and that are accessible to the general public Shall be posted with conspicuous signs that include the following wording in a size no less than 4 inches high by 8 inches wide: "RECYCLED WATER - DO NOT DRINK". Each sign shall also display an international symbol conveying the same warning.

M. Adjust spray heads to eliminate overspray onto areas not under the control of the customer. For Example pool decks, private patios, streets, and sidewalks.

N. Contact the IRWD office two days prior to the irrigation system coverage / and cross connection Test at (949) 453-5300 and arrange a walk through of the system.

O. Failure to comply with any or all of the above guidelines will place the system in violation of IRWD Rules and regulations, and will result in termination of service until the appropriate corrective Measures have been taken.

P. Warning tape on recycled water constant pressure main line piping is only allowed on project-by Project approval from the district engineer. **If approved,** it must follow these installation specs:
1. Warning tape shall be used on all constant pressure mains
2. Warning tape shall be minimum of 3-inches wide and shall run continuously for the entire length of the pipe. The tape shall be attached to the top of the pipe with plastic tape banded around the warning tape and the pipe every 5 feet on center.
3. Warning tape for the constant pressure recycled water piping shall be purple in color with the words "Caution – Recycled Water" imprinted a minimum of 1-inch high and black in color. Imprinting shall be continuous and permanent.

Q. On-site systems maintenance-all repairs and modifications must be reviewed and approved by the District's On-site Water Systems Group in a manner consistent with the requirements herein.

FOR SINGLE FAMILY RESIDENCES

R. All potable water piping outside of the structure shall be copper. See notes F,G & H.

S. All recycled water piping shall be purple colored PVC pipe.

T. An approved RP backflow device shall be installed downstream of the potable water meter.

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3757

ONSITE APPROVAL: _____ DATE: 8-30-17

PLAN CHECK NO. 00687655--ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY: LICENSED LANDSCAPE ARCHITECT — DAVID S. TAYSOM — Retired 6-30-18 Renewal Date 01-05-17 — STATE OF CALIFORNIA

2033 — LANDSCAPE ARCHITECT LICENSE NO. — 01-06-2017 DATE

DRAWN BY: DATE

DESIGNED BY: DATE

CHECKED BY: DATE

RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION

IRRIGATION NOTES

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

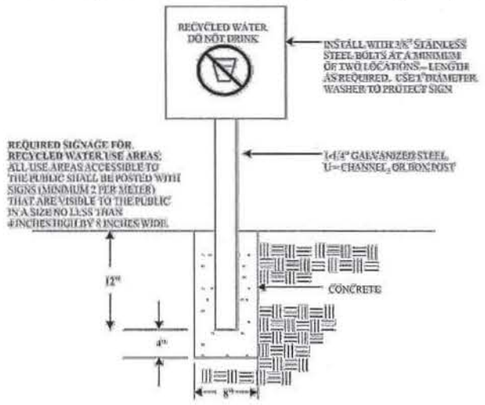
PROJECT NO.

SHEET 26 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

All Proper Signage, as shown below, must be in place prior to issuance of a Jumper or Meter for Your System. Failure to install the required signs per IRWD Standards will delay your meter set, or request for a jumper. If a system is found to be operating on a jumper or meter without the proper signs being installed, you will be given 48 hours notice to install proper signs before IRWD will lock off existing jumpers or meters. IRWD will not be responsible for any subsequent landscape material that may wither and die as a result of a jumper or meter being locked off.

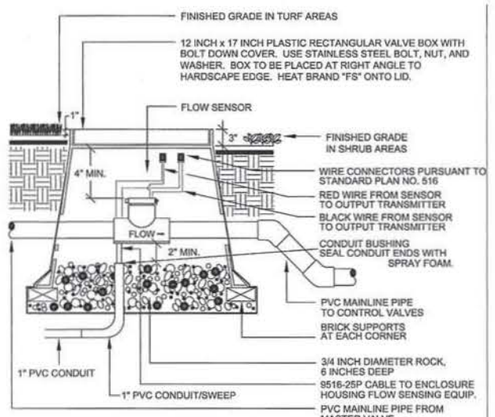


RECYCLED WATER WARNING SIGN

N.T.S.

FOR MINIMUM WORDING REQUIRED ON SIGNAGE REFERENCE THE ON-SITE NOTES LETTER "L".

D | RECYCLED WATER WARNING SIGN



SECTION VIEW - N.T.S.

NOTE:
INSTALL FLOW SENSOR PURSUANT TO THE MANUFACTURER'S RECOMMENDATIONS AND WIRE TRANSMITTER TO THE IRRIGATION CONTROLLER.

THE MAINLINE PIPE SHALL NOT CHANGE SIZE OR DIRECTION CLOSER THAN 5 FEET UPSTREAM OR 3 FEET DOWNSTREAM OF THE FLOW SENSOR.

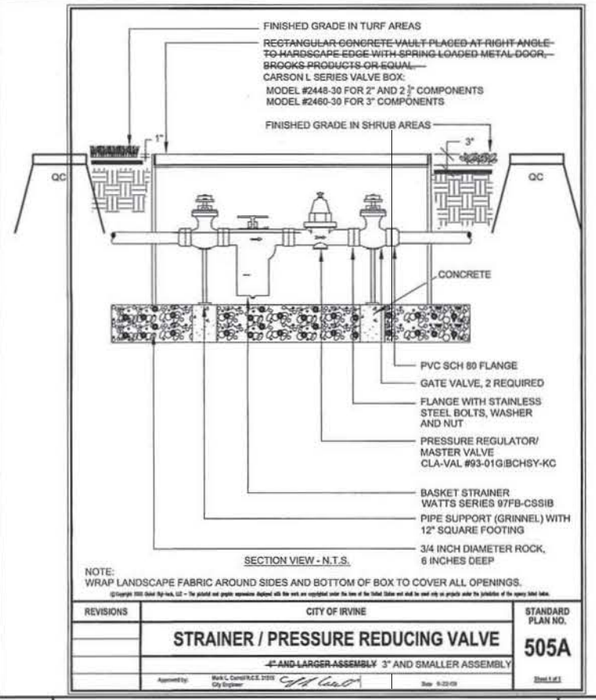
USE 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH ON THE DOWNSTREAM SIDE OF THE FLOW SENSOR.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	FLOW SENSOR	509
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

C | FLOW SENSOR | N.T.S.



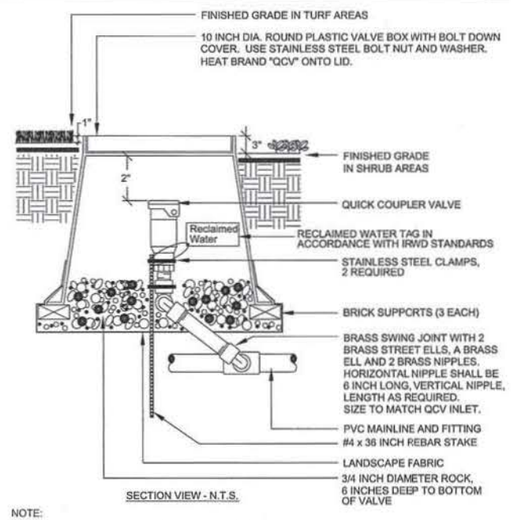
SECTION VIEW - N.T.S.

NOTE:
WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	STRAINER / PRESSURE REDUCING VALVE	505A
	~~4" AND LARGER ASSEMBLY~~ 3" AND SMALLER ASSEMBLY	
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

B | STRAINER VALVE | N.T.S.



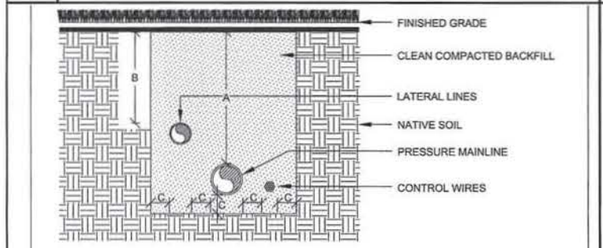
SECTION VIEW - N.T.S.

NOTE:
USE TEFLON TAPE ON ALL THREADED FITTINGS.
QUICK COUPLER KEY MUST CLEAR VALVE BOX.
WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	QUICK COUPLER VALVE IN BOX	508
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

A | QUICK COUPLER | N.T.S.



DIMENSION	A	B	C
1/2" TO 2 1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"	X	4"

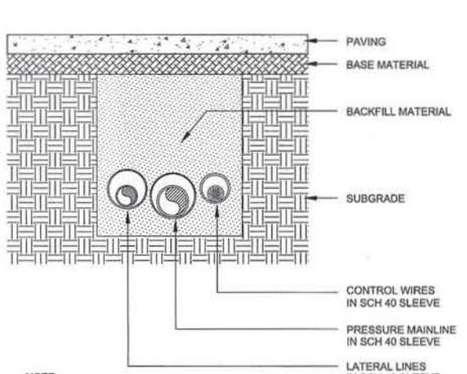
SECTION VIEW - N.T.S.

NOTE:
ALL PLASTIC PIPING SHALL BE SNAKED WITHIN TRENCH.
BUNDLE WIRING AND WRAP WITH TAPE AT TEN FOOT INTERVALS.
ALL MAINLINE PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.
CONTRACTOR SHALL PROVIDE MINIMUM 2 SPARE WIRES IN EACH DIRECTION FOR EVERY CONTROLLER.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	PIPE AND WIRE TRENCHING	500
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

G | PIPE AND WIRE TRENCHING | N.T.S.



NOTE:
ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

ALL MAINLINE, LATERAL LINES, AND CONTROL WIRES SHALL BE SLEEVED BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC, 2 TIMES THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.

DEPTH OF SLEEVES, BACKFILL, AND COMPACTION OF TRENCH SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 223 FOR CROSSINGS OF STREETS AND SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 500 FOR CROSSINGS OF PARKING LOTS, SIDEWALKS, OR OTHER HARDSCAPE ELEMENTS.

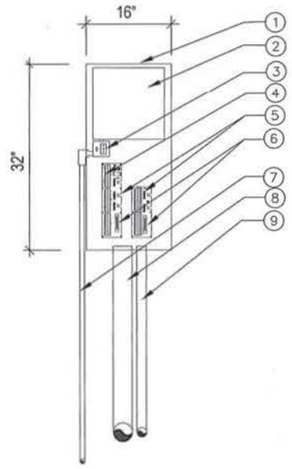
HORIZONTAL DIMENSION BETWEEN SLEEVES SHALL BE A MINIMUM OF 4 INCHES.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SLEEVE TRENCHING	501
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	Sheet 1 of 1

F | SLEEVE TRENCHING | N.T.S.

IMPERIAL ASSEMBLY



1. *IMPERIAL ASSEMBLIES 16" WALL MOUNTED BACKBOARD CONTROLLER ASSEMBLY (UL LISTED)*
2. *CONTROLLER*
3. *POWER SWITCH/GFI RECEPTACLE*
4. *MASTER VALVE RELAY ASSEMBLY OR PUMP START RELAY ASSEMBLY (OPTIONAL)*
5. *TERMINAL BOARD*
6. *REMOTE RECEIVER CONNECTOR (OPTIONAL)*
7. *1" PVC CONDUIT FOR 120 VAC FROM METERED POWER SUPPLY*
8. *PVC CONDUIT FOR CONTROL WIRES, SIZE AS REQUIRED*
9. *1" PVC CONDUIT FOR FLOW SENSOR CABLE PAIGE CABLE P – 7162 – D (IF APPLICABLE)*

** Note all grounding requirements for controller assemblies shall conform to local electrical codes.*

PC #3757
8-7017

E | 16" CONTROLLER ASSEMBLY

PLAN CHECK NO. 00687655--ELC

CIP NO. 351501 & 351601

PROJECT NO.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Rev 8-31-16, Revised 9/30 01-06-17

2033 — 01-06-2017
LANDSCAPE ARCHITECT — LICENSE NO. — DATE

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION

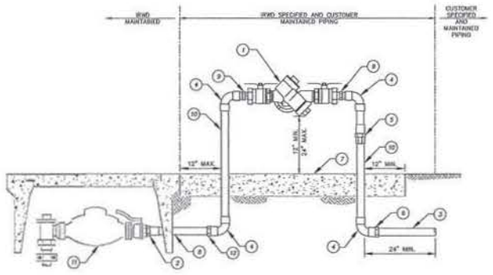
IRRIGATION DETAILS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

SHEET 27 OF 30

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

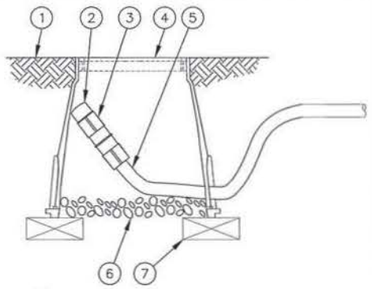


ITEM	MATERIALS
1	3/4" THROUGH 2" REDUCED PRESSURE BACKFLOW PREVENTOR WITH BALL VALVES.
2	PVC ADAPTER, M.I.P.T. X P.I.P.T.
3	COPPER WATER TUBE, TYPE "K" OR BRASS OR SCH 40 PVC.
4	COPPER OR BRASS 90 DEGREE BEND WITH COPPER SOLDER JOINTS.
5	COPPER OR BRASS UNION WITH COPPER SOLDER OR THREADED JOINTS.
6	BRASS OR COPPER TO PVC ADAPTER.
7	18" WIDE X 4" THICK CONCRETE PAD, LENGTH VARIES PER ASSEMBLY SIZE.
8	SCH 40 PVC PIPE.
9	BRASS OR COPPER NIPPLE.
10	COPPER WATER TUBE, TYPE "K" OR BRASS.
11	1" OR 2" SERVICE PER IRWD STD. DWG. W-1 AND W-3.
12	PVC TO BRASS OR COPPER ADAPTER.

NOTES:
1. PROVIDE AN USC APPROVED BACKFLOW PREVENTION ASSEMBLY.
2. IRWD MAINTENANCE RESPONSIBILITY STOPS AT THE METER. THE CUSTOMER IS RESPONSIBLE TO TEST AND MAINTAIN THE BACKFLOW PREVENTION ASSEMBLY. CERTIFICATION SHALL BE DELIVERED TO IRWD.
3. BACKFLOW CERTIFICATION TESTING IS REQUIRED ANNUALLY AT A MINIMUM BUT MAY BE MORE FREQUENT AS DEEMED NECESSARY BY IRWD. CERTIFICATION TESTING IS REQUIRED IMMEDIATELY AFTER AN ASSEMBLY IS RELOCATED, REPLACED, AND REPAIRED.
4. BACKFLOW PREVENTION ASSEMBLY SIZE SHALL MATCH THE DIAMETER OF THE METER IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE, CHAPTER 6, SECTION 610 AS AMENDED, OR UP TO 1" LARGER.
5. BACKFLOW PREVENTION ASSEMBLY INSTALLATIONS INCLUDING ALL APPURTENANCES FOR THE SUPPLY OF DOMESTIC WATER SHALL COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA LEAD-FREE ACT AB1953.
6. BACKFLOW PREVENTION ASSEMBLY SHALL BE LOCATED AS CLOSE AS PRACTICAL TO THE WATER METER BOX BUT NOT FURTHER THAN 12' UNLESS A VARIANCE IS OBTAINED FROM IRWD PRIOR TO INSTALLATION.
7. NO OUTLETS, TEES, OR CONNECTIONS SHALL BE ALLOWED BETWEEN THE METER AND THE BACKFLOW PREVENTION ASSEMBLY.
8. BACKFLOW PREVENTION ASSEMBLIES SHALL MAINTAIN A VERTICAL CLEARANCE FROM THE LOWEST POINT OF 12" (MIN.) TO 24" (MAX.) ABOVE FINISHED GRADE, WITH SIDE AND TOP CLEARANCES OF 12" (MIN.) FOR ANY OBSTRUCTIONS IN ALL DIRECTIONS.
9. PARALLEL INSTALLATIONS OF THE SAME TYPE OF BACKFLOW PREVENTION ASSEMBLIES ARE RECOMMENDED FOR ALL FACILITIES REQUIRING UNINTERRUPTED WATER SUPPLY, SUCH AS, HOSPITALS AND SCHOOLS.
10. THEFT PREVENTION DEVICES ARE RECOMMENDED FOR BRASS ASSEMBLIES ALLOWING ADEQUATE ACCESS TO THE ASSEMBLY FOR TESTING, MAINTENANCE, AND PROPER DRAINAGE.

REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY, 2" AND SMALLER
IRVINE RANCH WATER DISTRICT, ENGINEERING DEPARTMENT
APPROVED BY: JOHN L. BURTON, SAUL KIENKO, EXECUTIVE DIRECTOR, ENGINEERING AND WATER QUALITY
JANUARY 2017 REVISION
IRWD STD. DWG. W-7
SHEET 1 OF 1

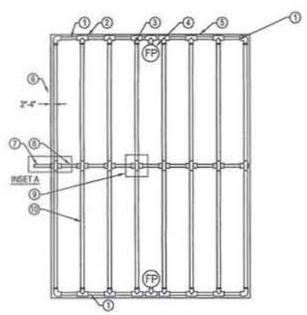
K REDUCED PRESSURE ZONE ASSEMBLY — N.T.S.



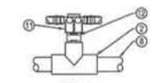
1. FINISH GRADE
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS:
   POTABLE: RAIN BIRD MDCFCAP
   NON-POTABLE: RAIN BIRD MDCFPCAP
3. EASY FIT COUPLING:
   RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX:
   RAIN BIRD SEB 7XB
5. SUB-SURFACE DRIPLINE:
   RAIN BIRD XF SERIES DRIPLINE
   POTABLE: XFS DRIPLINE
   NON-POTABLE: XFSP DRIPLINE
6. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
7. BRICK (1 OF 2)

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

J XFS SUB-SURFACE DRIPLINE FLUSH POINT — N.T.S.

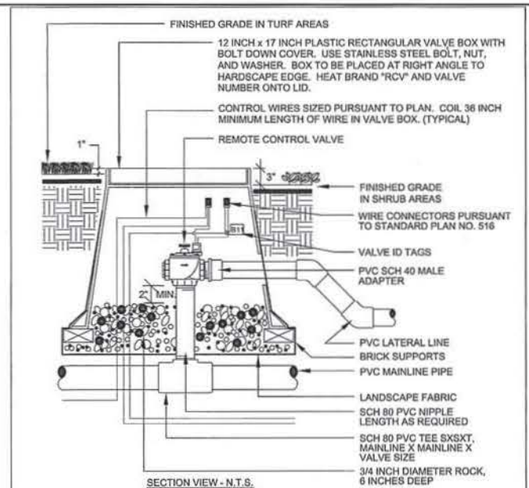


LEGEND:
1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING (TYPICAL) SALCO SLY-MAD
4. FLUSH POINT (TYPICAL)
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2'-4" FROM PERIMETER OF AREA
7. PVC SUPPLY PIPE FROM CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
8. PVC SUPPLY MANIFOLD
9. CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL)- SEE INSET A
10. DRIPLINE (TYPICAL) SALCO SILT NON-POTABLE: DRIPLINE PURPLE
11. BARB X FEMALE FITTING
12. 3/4" PVC NIPPLE, LENGTH AS NECESSARY



NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.
4. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
5. DO NOT SCALE DRAWING.
6. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
7. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
8. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5035-001.
9. TUBING STAKES TO BE INSTALLED AT 3' O.C. AND AT EACH FITTING.
10. PVC SCH 40 PIPES TO BE INSTALLED BELOW GRADE.

I DRIPLINE - CENTER FEED LAYOUT — N.T.S.



SECTION VIEW - N.T.S.

NOTE:
INSTALL CONTROL VALVES A MINIMUM OF TWO FEET APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.

INSTALL CHRISTY'S MODEL #3800 RECLAIMED WATER IDENTIFICATION NAME PLATES TO THE LID OF EACH RECLAIMED WATER VALVE BOX.

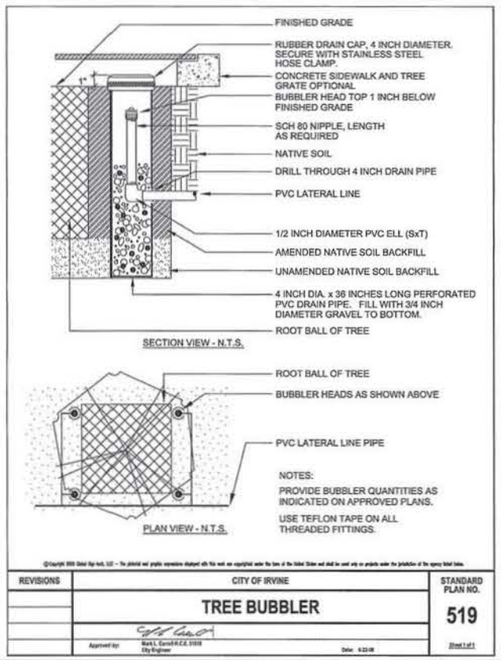
USE TEFLON TAPE ON THREADED FITTINGS.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	ANGLE REMOTE CONTROL VALVE	510
	Approved by: Mark L. Carroll R.C.E. 51515, City Engineer — Date: 4-03-09	Sheet 1 of 1

H ANGLE REMOTE CONTROL VALVE — N.T.S.



SECTION VIEW - N.T.S.

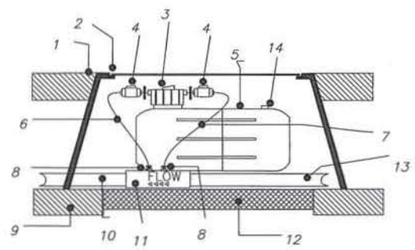
NOTES:
PROVIDE BUBBLER QUANTITIES AS INDICATED ON APPROVED PLANS.
USE TEFLON TAPE ON ALL THREADED FITTINGS.

PLAN VIEW - N.T.S.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	TREE BUBBLER	519
	Approved by: Mark L. Carroll R.C.E. 51515, City Engineer — Date: 4-03-09	Sheet 1 of 1

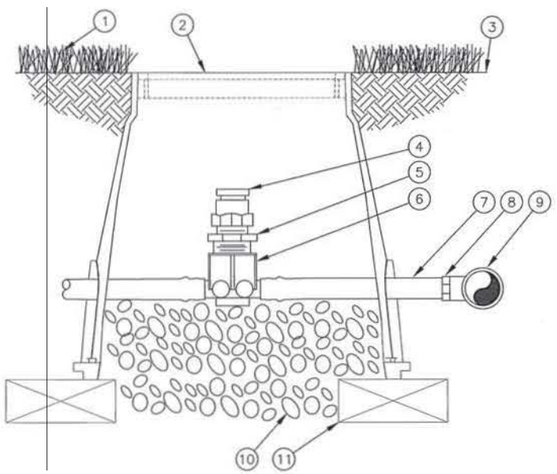
N TREE BUBBLER — N.T.S.



NOTE:
ITEMS 3, 4, 5, 6, 7 AND 8 ARE INCLUDED WITH THE EZ-FLO SYSTEM. ITEM 11 IS PURCHASED SEPARATELY.

1. FINISHED GRADE
2. VALVE BOX & COVER 24" L X 13" W X 16" H
3. PROPORTIONING CAP WITH FEED ADJUSTMENT KNOB
4. EZ-FLO SHUT OFF VALVES WITH DISCONNECT WASHERS
5. EZ-FLO MODEL EZ003-CX FERTILIZING SYSTEM 21" L X 8" W X 11" H
6. FERTILIZER OUT - CONNECT CLEAR TUBE TO GREEN CONNECTIONS ON PROPORTIONING CAP AND COUPLING
7. WATER IN - CONNECT BLACK TUBE TO BLUE CONNECTIONS ON PROPORTIONING CAP AND COUPLING
8. 1/4" TUBING CLAMP - BOTH THE GREEN AND BLUE COUPLING TUBING CONNECTIONS
9. APPROVED BACKFILL
10. PVC MAIN LINE TO VALVE MANIFOLD
11. EZ COUPLING CONNECTOR - INSTALL ACCORDING TO WATER FLOW DIRECTION ARROW
12. PVC MAIN LINE FROM BACK FLOW PREVENTER
13. PEA GRAVEL (1 CU. FT.)
14. PRESSURE RELEIF VALVE

M EZ-FLO FERTILIZING SYSTEM — N.T.S.



1. TURF GRASS
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. FINISH GRADE
4. 1/2" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
5. 1/2" X 3/4" PVC REDUCER BUSHING
6. BARB X FEMALE THREAD CONNECTOR: RAIN BIRD XFD-TFA FITTING
7. 1/2" BLANK DRIPLINE TUBING: RAIN BIRD XF SERIES
8. BARB X MALE THREAD CONNECTOR: RAIN BIRD XFF-MA FITTING
9. PVC TEE CONNECTED TO PVC HEADER PIPE
10. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
11. BRICK (1 OF 2)

PC #3754
8-30-17

L XFS SUB-SURFACE DRIPLINE 1/2" AIR RELIEF VALVE — N.T.S.

PLAN CHECK NO. 00687655-ELC
CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:
LICENSED LANDSCAPE ARCHITECT — LLOYD R. TAYLOR — No. 2033 — Renewal 8-31-18 — Effective Date 01-06-17 — STATE OF CALIFORNIA
2033 01-06-2017
LANDSCAPE ARCHITECT LICENSE NO. DATE

		DATE
DRAWN BY:		DATE
DESIGNED BY:		DATE
CHECKED BY:		DATE
RECOMMENDED BY:		DATE

STREETSCAPE REHABILITATION

IRRIGATION DETAILS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.
SHEET 28 OF 30

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL #	VOLUME	PSI	NOTES
●	BUBBLER	RAINBIRD	RWS-B-1402	.50	30	TWO PER TREE SEE DETAIL N, SHT. 28
- - - - - -	DRIPLINE □ EMITTERS	SALCO PRODUCTS, INC.	SLV-SIL 17-9-18-1000-NP	0.5 GPH (GALLONS PER HOUR)	30	18" LINE SPACING AND 18" EMITTER SPACING SEE DETAIL I, SHT. 28
———	PURPLE PIPE - LATERAL LINE	SCH. 40 PVC NON-PRESSURIZED PURPLE PIPE. SIZE AS NOTED ON PLANS.				SEE DETAIL G, SHT. 27
⊕	MP ROTORS	HUNTER	PROS-12-PRS40-MP1000180	GPM: 0.42		SEE CITY STANDARD PLAN NO. 521, SHT 9
	REMOTE CONTROL VALVE (LOW FLOW) WITH WYE STRAINER	RAINBIRD	100PESB-R (1") 200PSEB-R (2")	GPM: 2.9-16.0 GPM: 3.3-18.9		SEE DETAIL H, SHT. 28
	BUBBLER REMOTE CONTROL VALVE	GRISWOLD	DWS-200R (1")	GPM: 2.9-13.7		SEE DETAIL H, SHT. 28
AR	AIR RELIEF VALVE	RAINBIRD	ARV050			SEE DETAIL L, SHT. 28
FV	FLUSH VALVE	RAINBIRD	XFS			SEE DETAIL J, SHT. 28
⊙	QUICK COUPLING VALVE (QCV)	NELSON □SIGNATURE	7645 (1") (PURPLE CAP) IN CARSON VALVE BOX MODEL #910			SEE DETAIL A, SHT. 27
BS	BASKET STRAINER	WATTS	97FB-CSSIB (2") (30 MESH)			SEE DETAIL B, SHT. 27
BF	REDUCED PRESSURE ZONE ASSEMBLY	FEBCO	LF825Y-QT RP (2")			SEE DETAIL K, SHT. 28
PR	PRESSURE REDUCING VALVE	WILKINS	500HLR (2-1/2")			500 SERIES
MVPR	MASTER VALVE/PRESSURE REGULATOR	CLA-VAL COMBO MASTER VALVE AND PRESSURE REGULATOR	93-01/893-01 (2")			SEE DETAIL Q , SHT. 29
FS	FLOW SENSOR/FLOW METER (FS)	RAIN MASTER □DATA INDUSTRIAL	FS-B150 (1½") □ FS-B200 (2") □220 SERIES			SEE DETAIL C, SHT. 27
	GATE VALVE	NIBCO	T-113 (2") □□ F-619-RW-SON (2 ½")			SEE DETAILS N AND P, SHT. 29
FI	FERTILIZING SYSTEM	EZ-FLO	EZ003-CX			SEE DETAIL M, SHT. 28
A	IRRIGATION CONTROLLER W/BACKBOARD	HYDROPOINT	HP3-XX/SP/HP3SP-5A/HP-FL2/SR-K			SEE DETAIL E, SHT. 27 XX=# STATIONS, SEE INDIVIDUAL PLAN SHTS FOR STATION #.
RW	RECYCLED WATER METER	CITY OF IRVINE	1 1/2" DISC □ 2" DISC RECYCLED WATER METER			CONTRACTOR SHALL CONTACT IRVINE RANCH WATER DISTRICT (949-453-5300) PRIOR TO BEGINNING THIS ITEM OF WORK.
DW	DOMESTIC WATER METER	CITY OF IRVINE	--			--
←——→	CONTROL WIRES	DIRECT BURIAL	--			--
———	NEW MAINLINE	PURPLE PIPE CLASS 315 2" OR LARGER OR PURPLE SCH 40 1 ½" OR SMALLER	--			
═══	IRRIGATION/WIRE SLEEVE	PVC SCH 40	--			
C	CONNECT TO EXISTING IRRIGATION SYSTEM					
	CAP MAINLINE					
BS	EXISTING BASKET STRAINER					
MV	EXISTING MASTER VALVE					
PR	EXISTING PRESSURE REGULATOR					
FS	EXISTING FLOW SENSOR/FLOW METER (FS)					
RW	EXISTING RECYCLED WATER METER (RW)					INSTALLED BY IRVINE RANCH WATER DISTRICT
	EXISTING IRRIGATION CONTROLLER					
DW	EXISTING DOMESTIC WATER METER					
BF	EXISTING BACKFLOW PREVENTER					
	EXISTING GATE VALVE					
	EXISTING MAINLINE					

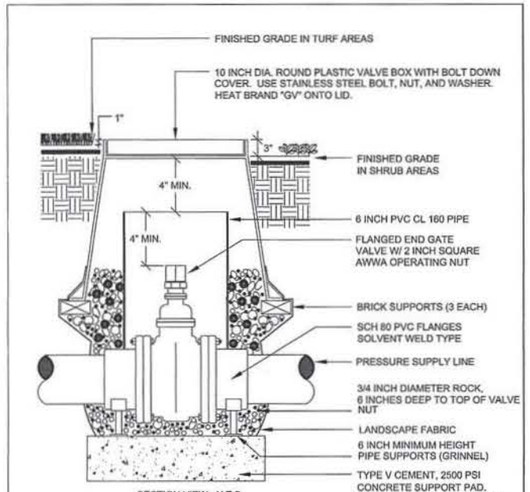
FLOW, GALLONS PER MINUTE (GPM) — 16.0 / A-1 / 1" — STATION NUMBER; VALVE SIZE, INCHES

APPROVAL FOR ONSITE RECYCLED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THROUGH THE IRWD DEVELOPMENT SERVICES GROUP. FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK #: 3759

ONSITE APPROVAL: _____ DATE: 8-30-17



SECTION VIEW - N.T.S.

NOTE:
CONTRACTOR TO PROVIDE ONE 5 FOOT LONG TEE WRENCH WITH SQUARE NUT ADAPTER FOR THE OPERATION OF GATE VALVES.

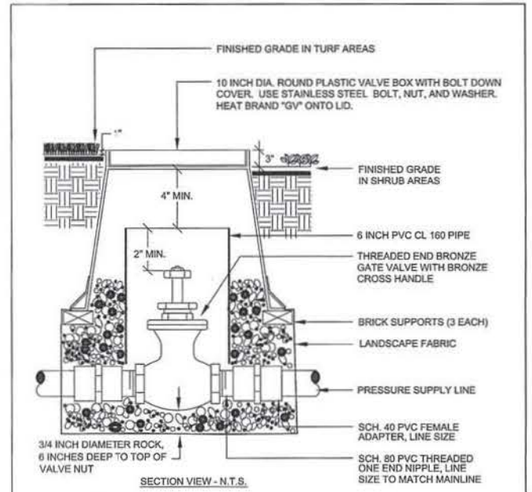
INSTALL VALVE BOX AND PIPE EXTENSION AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GATE VALVE 2 1/2 INCHES AND LARGER	507
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-09	Sheet 1 of 1

P | GATE VALVE - 2 1□2" AND LARGER | N.T.S.



SECTION VIEW - N.T.S.

NOTE:
INSTALL VALVE BOX AND PIPE EXTENSION AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GATE VALVE 2 INCHES & SMALLER	506
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-09	Sheet 1 of 1

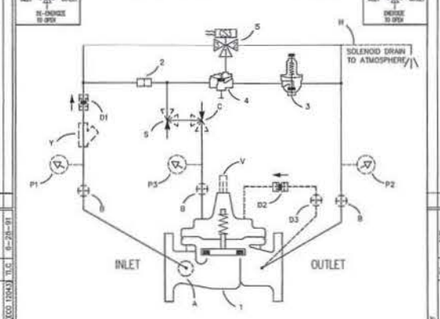
O | GATE VALVE - 2" AND SMALLER | N.T.S.

CVCL 1 2 3 4 — DIST. CODE 002 — SHEET 1 OF 3

CLA-VAL CO. NEWPORT BEACH, CALIFORNIA — DRAWING NO. 93-01/693-01 — 76898 — REV. N

TYPE OF VALVE AND MAIN FEATURES: COMBINATION PRESSURE REDUCING AND SOLENOID SHUTOFF VALVE EQUIPPED WITH CRO PRESSURE REDUCING CONTROL

DESIGN: DRAW JD 11-30-78; CHK'D DP 11-30-78; APV'D WAL 11-30-78



ITEM NO.	BASIC COMPONENTS	QTY
1	100-01 HYTROL (93-01) MAIN VALVE	1
	100-20 HYTROL (693-01) MAIN VALVE	
2	X58C RESTRICTION ASSEMBLY	1
3	CRO PRESSURE REDUCING CONTROL	1
4	100-01 HYTROL (REVERSE FLOW)	1
5	CS3 SOLENOID CONTROL	1

	OPTIONAL FEATURE SUFFIX ADDED TO CATALOG NUMBER				
A	X46A FLOW CLEAN STRAINER	1	S	CV FLOW CONTROL (OPENING)	1
B	CK2 COCK (ISOLATION VALVE)	3	V	X101 VALVE POSITION INDICATOR	1
C	CV FLOW CONTROL (CLOSING)	1	Y	X43 "Y" STRAINER	1
D	CHECK VALVE WITH COCK	1			
H	SOLENOID DRAIN TO ATMOSPHERE				
P	X141 PRESSURE GAUGE	3			

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CVCL 1 2 3 4 — DIST. CODE 002 — SHEET 2 OF 3

CLA-VAL CO. NEWPORT BEACH, CALIFORNIA — DRAWING NO. 93-01/693-01 — 76898 — REV. N

TYPE OF VALVE AND MAIN FEATURES: COMBINATION PRESSURE REDUCING AND SOLENOID SHUTOFF VALVE EQUIPPED WITH CRO PRESSURE REDUCING CONTROL

DESIGN: DRAW JD 11-30-78; CHK'D DP 11-30-78; APV'D WAL 11-30-78

OPERATING DATA

I. SOLENOID CONTROL FEATURE:
SOLENOID CONTROL (5) IS A DIRECT ACTING, 3-WAY SOLENOID CONTROL THAT CHANGES POSITION WHEN THE COIL IS DE-ENERGIZED OR ENERGIZED. THIS APPLIES OR RELIEVES PRESSURE IN THE COVER CHAMBER OF AUXILIARY HYTROL (4), PROVIDING THE OPERATION SHOWN IN THE FOLLOWING TABLE:

SOLENOID CONTROL (5)		93E-01 SERIES		93D-01 SERIES	
POSITION	PORTS CONNECTED	AUXILIARY HYTROL (4) POSITION	MAIN VALVE (1) POSITION	AUXILIARY HYTROL (4) POSITION	MAIN VALVE (1) POSITION
ENERGIZED	1 & 2	OPEN	OPEN UNDER COMMAND OF CONTROL (3)	CLOSED	CLOSED
DE-ENERGIZED	1 & 3	CLOSED	CLOSED	OPEN	OPEN UNDER COMMAND OF CONTROL (3)

II. PRESSURE REDUCING FEATURE:
PRESSURE REDUCING CONTROL (3) IS A NORMALLY OPEN CONTROL THAT SENSES MAIN VALVE OUTLET PRESSURE CHANGES. AN INCREASE IN OUTLET PRESSURE TENDS TO CLOSE CONTROL (3) AND A DECREASE IN OUTLET PRESSURE TENDS TO OPEN CONTROL (3). THIS CAUSES MAIN VALVE COVER PRESSURE TO VARY AND THE MAIN VALVE MODULATES (OPENS AND CLOSES) MAINTAINING A RELATIVELY CONSTANT OUTLET PRESSURE. PRESSURE REDUCING CONTROL (3) ADJUSTMENT: TURN THE ADJUSTING SCREW CLOCKWISE TO INCREASE THE SETTING.

III. OPTIONAL FEATURE OPERATING DATA:

SUFFIX A (FLOW CLEAN STRAINER)
A SELF-CLEANING STRAINER IS INSTALLED IN THE MAIN VALVE INLET BODY BOSS WHICH PROTECTS THE PILOT SYSTEM FROM FOREIGN PARTICLES.

SUFFIX B (ISOLATION VALVES)
CK2 COCKS (B) ARE USED TO ISOLATE THE PILOT SYSTEM FROM MAIN LINE PRESSURE. THESE VALVES MUST BE OPEN DURING NORMAL OPERATION.

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CVCL 1 2 3 4 — DIST. CODE 002 — SHEET 3 OF 3

CLA-VAL CO. NEWPORT BEACH, CALIFORNIA — CATALOG NO. 93-01/693-01 — 76898 — REV. N

TYPE OF VALVE AND MAIN FEATURES: COMBINATION PRESSURE REDUCING AND SOLENOID SHUTOFF VALVE EQUIPPED WITH CRO PRESSURE REDUCING CONTROL

DESIGN: DRAW JD 11-30-78; CHK'D DP 11-30-78; APV'D WAL 11-30-78

OPERATING DATA – CONTINUED

SUFFIX C (CLOSING SPEED CONTROL)
FLOW CONTROL (C) CONTROLS THE CLOSING SPEED OF THE MAIN VALVE. TURN THE ADJUSTING STEM CLOCKWISE TO MAKE THE MAIN VALVE CLOSE SLOWER.

SUFFIX B (CHECK VALVES WITH COCK)
WHEN OUTLET PRESSURE IS HIGHER THAN INLET PRESSURE, CHECK VALVE (D2) OPENS AND (D1) CLOSES. THIS DIRECTS THE HIGHER OUTLET PRESSURE INTO THE MAIN VALVE COVER AND THE MAIN VALVE CLOSES.

SUFFIX H (ATMOSPHERIC DRAIN)
PILOT SYSTEM DRAIN LINE IS DISCHARGED TO ATMOSPHERE. [PILOT SYSTEM DRAIN LINE IS CONNECTED TO THE MAIN VALVE OUTLET BOSS IF SUFFIX (H) IS NOT SPECIFIED.]

SUFFIX P (PRESSURE GAUGE):
PRESSURE GAUGES (P) PROVIDE PRESSURE READING IN THE INLET, OUTLET AND COVER CONNECTIONS.

SUFFIX S (OPENING SPEED CONTROL)
FLOW CONTROL (S) CONTROLS THE OPENING SPEED OF THE MAIN VALVE. TURN THE ADJUSTING STEM CLOCKWISE TO MAKE THE MAIN VALVE OPEN SLOWER.

SUFFIX V (VALVE POSITION INDICATOR):
VALVE POSITION INDICATOR (V) DISPLAYS A VISUAL POSITION OF THE MAIN VALVE STEM.

SUFFIX Y (Y-STRAINER)
A Y-PATTERN STRAINER IS INSTALLED IN THE PILOT SUPPLY LINE TO PROTECT THE PILOT SYSTEM FROM FOREIGN PARTICLES. THE STRAINER SCREEN MUST BE CLEANED PERIODICALLY.

VI. CHECK LIST FOR PROPER OPERATION:
( ) SYSTEM VALVES OPEN UPSTREAM AND DOWNSTREAM.
( ) AIR REMOVED FROM THE MAIN VALVE COVER AND PILOT SYSTEM AT ALL HIGH POINTS.
( ) CK2 COCKS (B) OPEN (OPTIONAL FEATURE).
( ) CV FLOW CONTROLS (C) & (S) OPEN AT LEASE 4 TURNS (OPTIONAL FEATURE).
( ) PERIODIC CLEANING OF STRAINER (Y) IS RECOMMENDED.
( ) CORRECT VOLTAGE TO SOLENOID CONTROL (5).

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Q | MASTER VALVE □PRESSURE REGULATOR | N.T.S.

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
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PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — Daniel Vais — Rev 11-18, Exp 08-31-19, Exp 01-25-17 — STATE OF CALIFORNIA

LANDSCAPE ARCHITECT — LICENSE NO. 2033 — DATE 01-06-2017

DRAWN BY:	DATE
DESIGNED BY:	DATE
CHECKED BY:	DATE
RECOMMENDED BY:	DATE

STREETSCAPE REHABILITATION

IRRIGATION DETAILS □ LEGEND

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

PROJECT NO.

SHEET 29 OF 30

SHEET REVISED: 8/15/07

GENERAL PLANTING NOTES

1. CONTRACTOR SHALL VERIFY SITE CONDITIONS, REVIEW PLANS, AND PLANT QUANTITIES PRIOR TO INSTALLATION. CONFLICTS BETWEEN THE SITE AND THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY'S AUTHORIZED REPRESENTATIVE PRIOR TO LANDSCAPE INSTALLATION.
2. ANY DEVIATION(S) FROM THE PLANS OR SPECIFICATIONS SHALL HAVE WRITTEN APPROVAL BY THE CITY'S AUTHORIZED REPRESENTATIVE PRIOR TO BEGINNING WORK. DEVIATIONS CONDUCTED WITHOUT WRITTEN APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK.
3. THE LANDSCAPE ARCHITECT ASSUMES NO GUARANTEE OR RESPONSIBILITY FOR THE HEALTH OR VIABILITY OF THE SPECIFIED PLANT MATERIAL DUE TO UNKNOWN SOIL AND GEOLOGICAL CONDITIONS.
4. PLANTS MAY BE APPROVED OR REJECTED BY THE CITY'S AUTHORIZED REPRESENTATIVE AT THE PLACE OF GROWTH AND/OR ON THE PROJECT SITE AT ANY TIME DURING THE PROGRESS OF WORK.
5. THE CONTRACTOR SHALL NOTIFY CITY'S AUTHORIZED REPRESENTATIVE IF SPECIFIED PLANT MATERIAL IS NOT AVAILABLE BEFORE SUBSTITUTIONS ARE MADE. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY THE CITY'S AUTHORIZED REPRESENTATIVE.
6. ALL TREES, SHRUBS, ORNAMENTAL GRASSES, VINES AND GROUND COVER SHALL BE EQUAL TO OR SURPASS "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-2004) SPECIFICATIONS FOR QUALITY. ALL MEASUREMENTS SUCH AS HEIGHT/CALIPER RELATIONSHIP, NUMBER OF CANES, BALL SIZES, QUALITY DESIGNATIONS, ETC., SHALL BE IN ACCORDANCE WITH THE LATEST EDITION.
7. CONTRACTOR SHALL CONTRACT WITH A CITY APPROVED SOILS LAB AND CONDUCT AN AGRONOMIC SOILS TEST AT A MINIMUM OF TWO (2) LOCATIONS ON THE SITE. THE COST OF THE SOILS TESTS SHALL BE INCLUDED WITHIN THE CONTRACTOR'S BID.
8. CULTIVATE (ROTOTILL) PLANTING AREAS PER THE AGRONOMIC SOILS REPORT, WET SOIL THOROUGHLY AND ALLOW SOIL TO SETTLE. REPEAT UNTIL SOIL IS STABLE ENOUGH TO HOLD A UNIFORM, SMOOTH CONSISTENCY THAT ALLOWS FOR DRAINAGE AND AIR PENETRATION.
9. FERTILIZER FOR ALL PLANTING AREAS SHALL BE AS RECOMMENDED IN THE AGRONOMIC SOILS TEST FINDINGS AND AS CALLED OUT IN THE DETAILS.
10. TOP DRESS ALL PLANTING AREAS WITH Mulches 2 INCHES THICK. MULCH SHALL BE FOREST FLOOR BY TIERRA VERDE, OR APPROVED EQUAL.
11. PLANT QUANTITIES SPECIFIED TAKE PRECEDENCE OVER PLANT SYMBOLS SHOWN.
12. ALL PAVING SHALL BE SWEPT AT THE END OF EACH WORK DAY OF ALL SOIL AMENDMENTS AND PLANTING MIXES PRIOR TO ANY WATERING APPLICATIONS TO PREVENT ANY POSSIBLE STAINING.
13. CONTRACTOR SHALL KEEP ALL AREAS OF WORK CLEAN, NEAT AND ORDERLY AT ALL TIMES. CLEAN ALL CONSTRUCTION AREAS AT THE END OF EACH WORK DAY AND DISPOSE OF ALL DEBRIS OFF SITE IN A LEGAL MANNER.
14. CONTRACTOR SHALL PROTECT INPLACE ALL EXISTING TREES WITHIN THE PROJECT LIMITS. ANY DAMAGED OR REMOVED TREES SHALL BE REPLACED WITH THE SAME SPECIE AND CALIPER SIZE, UNLESS OTHER WISE APPROVED BY CITY'S REPRESENTATIVE.
15. THE CONTRACTOR SHALL MAINTAIN ALL PLANTED AREAS BY MEANS OF CONTINUOUS WATERING, PRUNING, RAISING ROOT BALLS WHICH SETTLE BELOW GRADE, FERTILIZING, APPLICATION OF SPRAYS WHICH ARE NECESSARY TO KEEP THE PLANTINGS FREE OF INSECTS AND DISEASES, WEEDING, ROLLING, MOWING, RE-SEEDING, EDGING AND/OR OTHER OPERATIONS NECESSARY FOR PROPER CARE AND UPKEEP. THE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS AS SPECIFIED ABOVE FOR A PERIOD OF NINETY (90) WORKING DAYS.
16. ALL PLANTING SHALL CONFORM TO THE CITY OF IRVINE LANDSCAPE DESIGN MANUAL.
17. AFTER REMOVAL OF IRRIGATION COMPONENTS, CONTRACTOR SHALL BACKFILL AND REPLACE IN KIND THE DISTURBED PLANTING AREAS TO MATCH THE EXISTING SURROUNDING LANDSCAPE.

HARDSCAPE

TREES

SYMBOL	NAME	QUANTITY	NOTES
———	CONCRETE HEADER	18 LF	--

PLANTING LEGEND

TREES

SYMBOL	WATER USE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	HEIGHT AND SPREAD	NOTES
BA	L	BRACHYCHITON ACERIFOLIUS	FLAME TREE	24" BOX	4	60' X 30'	--
PB	L	PINUS BRUTIA	AFGHAN PINE	24" BOX	3	30'-80' X 15'-25'	--

SHRUBS

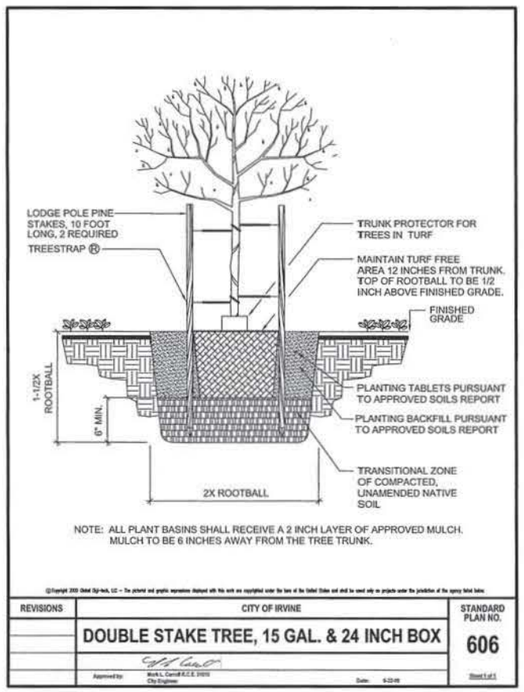
SYMBOL	WATER USE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	HEIGHT AND SPREAD	NOTES
⬡	L	CALLISTEMON 'LITTLE JOHN'	DWARF BOTTLEBRUSH	5 GAL	124	3'-5' X 4'-5'	--
⊕	L	LANTANA CAMARA X 'NEW GOLD'	NEW GOLD LANTANA	5 GAL	235	2' X 4'-6'	--

GROUND COVERS

SYMBOL	WATER USE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	HEIGHT AND SPREAD	NOTES
▭	L	CARISSA MACROCARPA 'GREEN CARPET'	NATAL PLUM	1 GAL	2,143	12"-15" X 4'-5'	4' O.C. SPACING

EXISTING TREES TO REMAIN

EXISTING BRACHYCHITON ACERIFOLIUS	PROTECT IN PLACE
EXISTING EUCALYPTUS CITRIODORA	PROTECT IN PLACE
EXISTING PINUS BRUTIA	PROTECT IN PLACE
EXISTING DECIDUOUS TREE	PROTECT IN PLACE

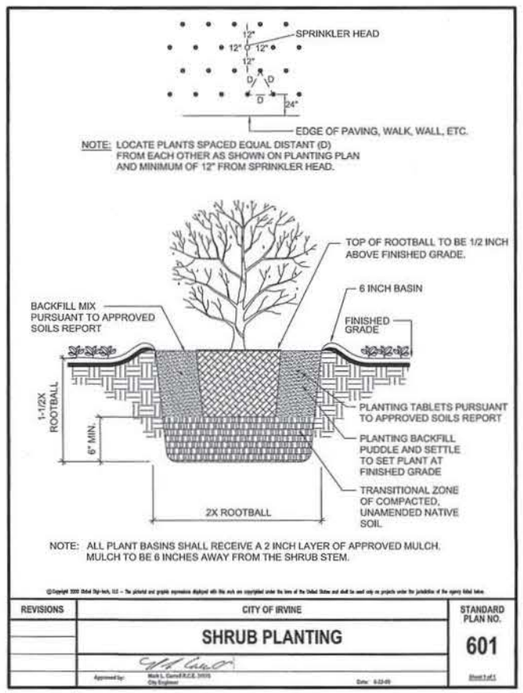


NOTE: ALL PLANT BASINS SHALL RECEIVE A 2 INCH LAYER OF APPROVED MULCH. MULCH TO BE 6 INCHES AWAY FROM THE TREE TRUNK.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	DOUBLE STAKE TREE, 15 GAL. & 24 INCH BOX	606
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-99	Sheet 1 of 1

D DOUBLE STAKE TREE N.T.S.



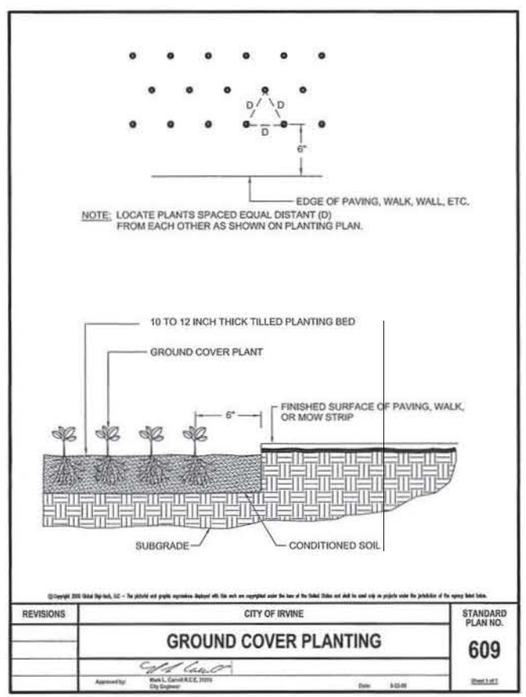
NOTE: LOCATE PLANTS SPACED EQUAL DISTANT (D) FROM EACH OTHER AS SHOWN ON PLANTING PLAN AND MINIMUM OF 12" FROM SPRINKLER HEAD.

NOTE: ALL PLANT BASINS SHALL RECEIVE A 2 INCH LAYER OF APPROVED MULCH. MULCH TO BE 6 INCHES AWAY FROM THE SHRUB STEM.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SHRUB PLANTING	601
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-99	Sheet 1 of 1

C SHRUB PLANTING N.T.S.

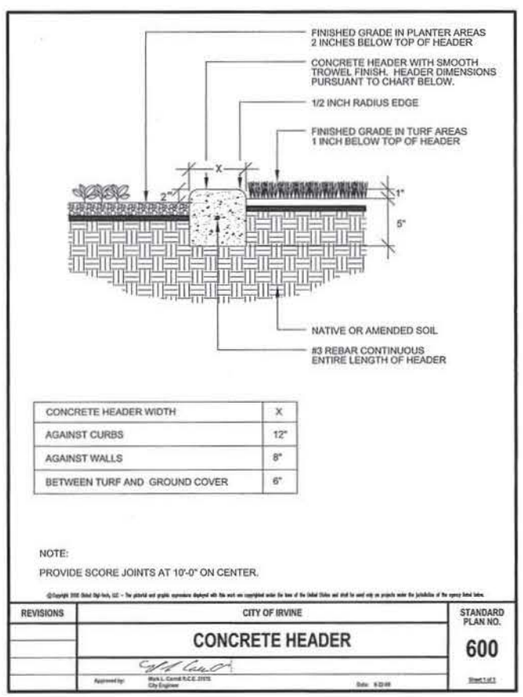


NOTE: LOCATE PLANTS SPACED EQUAL DISTANT (D) FROM EACH OTHER AS SHOWN ON PLANTING PLAN.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	GROUND COVER PLANTING	609
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-99	Sheet 1 of 1

B GROUND COVER PLANTING N.T.S.



CONCRETE HEADER WIDTH	X
AGAINST CURBS	12"
AGAINST WALLS	8"
BETWEEN TURF AND GROUND COVER	6"

NOTE:
PROVIDE SCORE JOINTS AT 10'-0" ON CENTER.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	CONCRETE HEADER	600
	Approved by: Mark L. Carroll R.C.E. 31015, City Engineer — Date: 6-22-99	Sheet 1 of 1

A CONCRETE HEADER N.T.S.

PLAN CHECK NO. 00687655-ELC

CIP NO. 351501 & 351601

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1	6/30/17	REVISION FROM SITE WALK			

PLAN PREPARED BY:

LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Expires 8-31-18 — Renewal Date 01-06-17

2033 — LANDSCAPE ARCHITECT — LICENSE NO. — 01-06-2017 DATE

DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE
RECOMMENDED BY: DATE

STREETSCAPE REHABILITATION
(NOT PART OF CONVERSIONS)
PLANTING LEGEND, DETAILS, & NOTES

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.

SHEET 30 OF 30

PATH = DWG = VIEW =

SHEET REVISED: 8/15/07

4.9

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN IRVINE BUSINESS COMPLEX AND CYPRESS VILLAGE

Director of Public Works

City Manager

RECOMMENDED ACTION

Receive and file.

EXECUTIVE SUMMARY

The subject notice to the City Council is provided in accordance with City of Irvine Ordinance No. 07-12, notifying the City Council of one final tract map under review by staff and one final tract map pending approval by the City Engineer. Ordinance No. 07-12 delegates authority to the City Engineer for approval of final tract maps and requires notice to the City Council following receipt of such maps for review and again prior to approval/disapproval by the City Engineer. The subject notice satisfies this requirement. This is a ministerial matter and there is no discretionary action to be taken by the City Council with regard to this matter. The tract maps covering property referenced in this staff report are located in the Irvine Business Complex and Cypress Village and are available for public review in the Public Works department.

Tract Map No. 17863 (Irvine Business Complex) is located near the intersection of Main and Gillette, as shown in Attachment 2. The map for this 2.38-acre property contains 7 lots for the development of 44 residential condominium units. This development project is consistent with the Irvine Business Complex Environmental Impact Report approved by the City Council in July 2010 that considered area-wide impacts associated with the ultimate build out for residential units in the Irvine Business Complex.

Tract Map No. 18095 (Cypress Village) is located near the intersection of Ridge Valley and Great Park Boulevard, as shown in Attachment 3. The map for this property contains the subdivision of 4.2 acres into 16 lots. The property is proposed for development of 48 condominium units. The Cypress Village development project implements land development anticipated in the Northern Sphere Area Final Environmental Impact Report, approved by City Council in June 2002.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Prior to City Engineer approval of a final tract map, the Planning Commission reviews and approves the corresponding tentative tract map based on consistency with the City's General Plan, Subdivision Ordinance and Zoning Code. The underlying tentative maps referenced in this staff report were approved by the Planning Commission as follows:

On April 20, 2017, the Planning Commission approved the underlying tentative map for Tract Map No. 17863 (Irvine Business Complex) by a vote of 4-0-1 (Commissioners Bartlett, Duong, Kuo, and Smith voting in favor; Commissioner Nirschl absent).

On July 6, 2017, the Planning Commission approved the underlying tentative map for Tract Map No. 18095 (Cypress Village) by a vote of 5-0, with all members present.

ANALYSIS

The approval of tract maps is a multi-step process that assures development is reflective and compliant with the City's General Plan and with respective provisions of the City's development standards. City of Irvine Ordinance No. 07-12 authorizes the City Engineer to approve final tract maps if they substantially conform to the approved underlying tentative map and all applicable conditions of approval have been satisfied. The ordinance further requires staff to notify the City Council upon receipt of such maps for review and prior to approval/disapproval of a final tract map by the City Engineer. In addition, the State Subdivision Map Act requires the approval of final maps if the City Engineer has found that the final map substantially conforms to the underlying tentative map.

The tract maps listed below have been received and are either under review for consistency with the applicable City standards and corresponding Planning Commission tentative tract map conditions of approval or have been reviewed and are pending the City Engineer's final approval. Following approval and a 15-day appeal period, the map will be released for recordation. Recordation of the maps is required prior to the issuance of building permits.

Submitted by	Tract Map No.	No. of Lots	Location	Status
Meritage Homes	17863	7-lot map	Main and Gillette *(Irvine Business Complex)*	Under Review
Irvine Community Development Company, LLC	18095	16-lot map	Ridge Valley and Great Park Boulevard *(Cypress Village)*	Pending Approval

ALTERNATIVES CONSIDERED

An alternative to this notification was not considered. Pursuant to the State Subdivision Map Act and City of Irvine Ordinance 07-12, when approval authority of tract maps is delegated to the City Engineer, notification to the City Council of receipt and approval of such maps is required.

FINANCIAL IMPACT

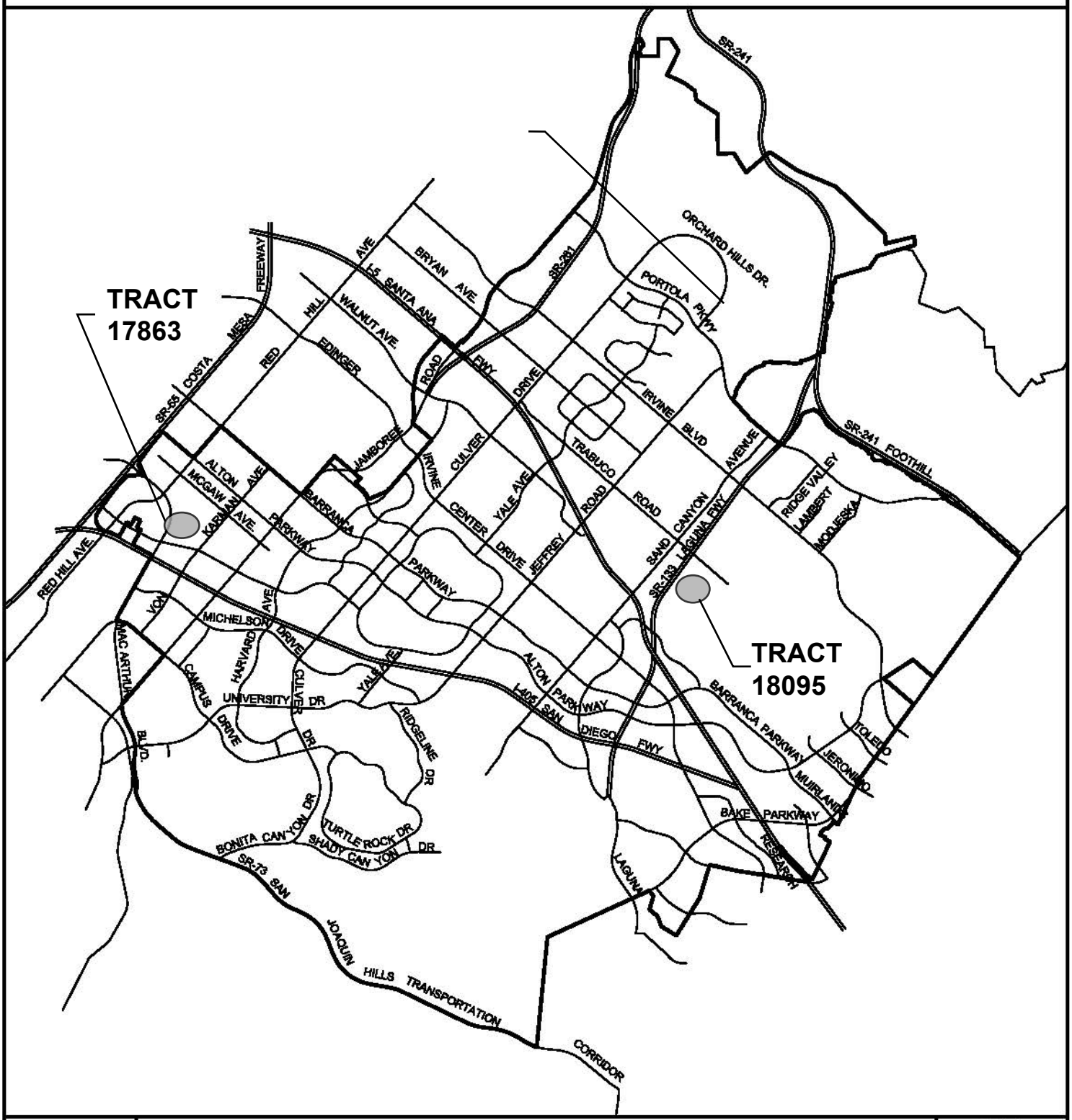
The administrative cost to the City for processing the maps is offset by developer fees paid by the applicant submitting the maps.

REPORT PREPARED BY Stacy DeLong, Associate Engineer

ATTACHMENTS

1. Vicinity Map
2. Site Map – Tract 17863 (Irvine Business Complex)
3. Site Map – Tracts 18095 (Cypress Village)

FINAL TRACT MAP Nos. 17863 AND 18095

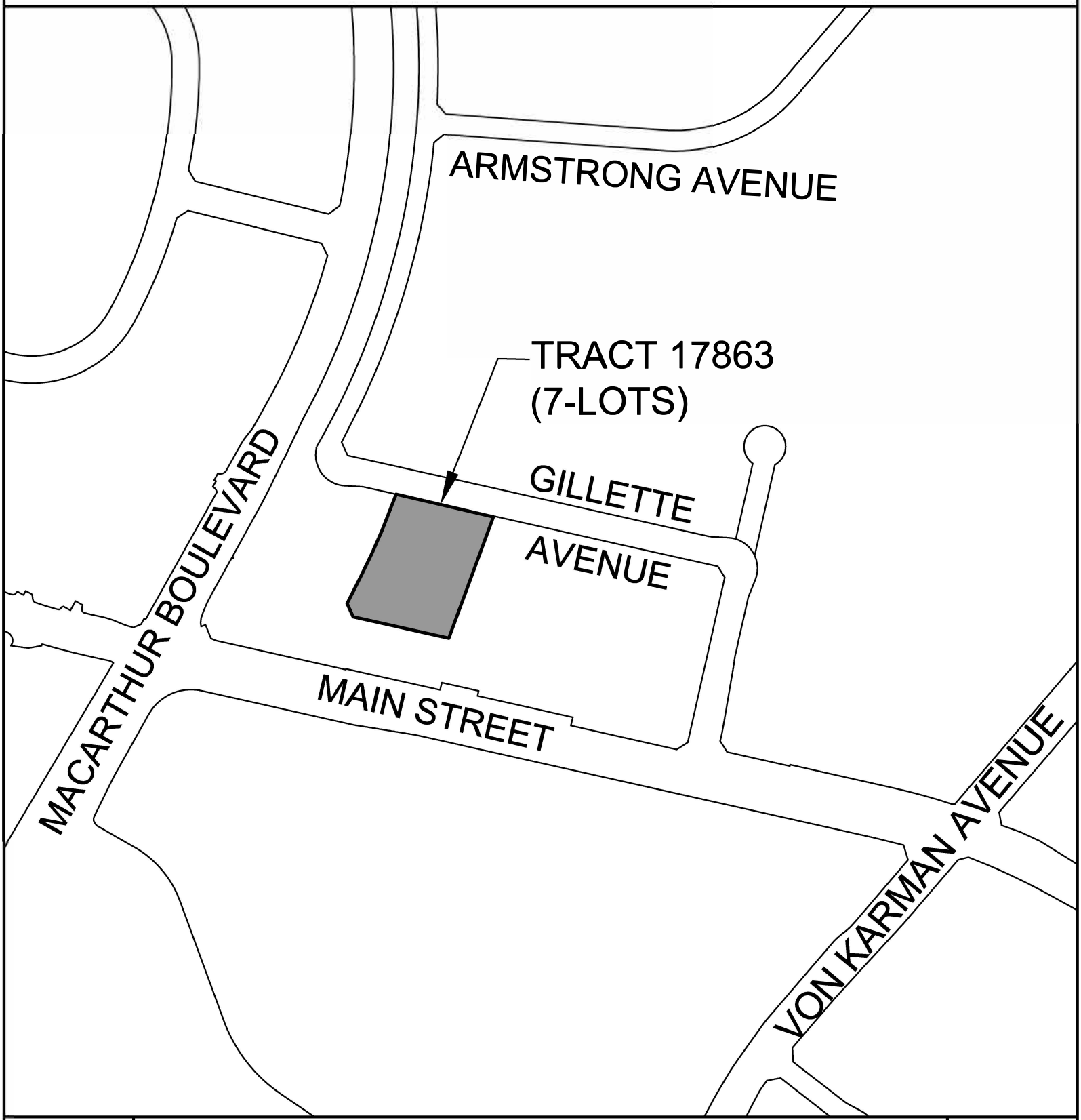


VICINITY MAP

CITY OF IRVINE 1971

ATTACHMENT 1

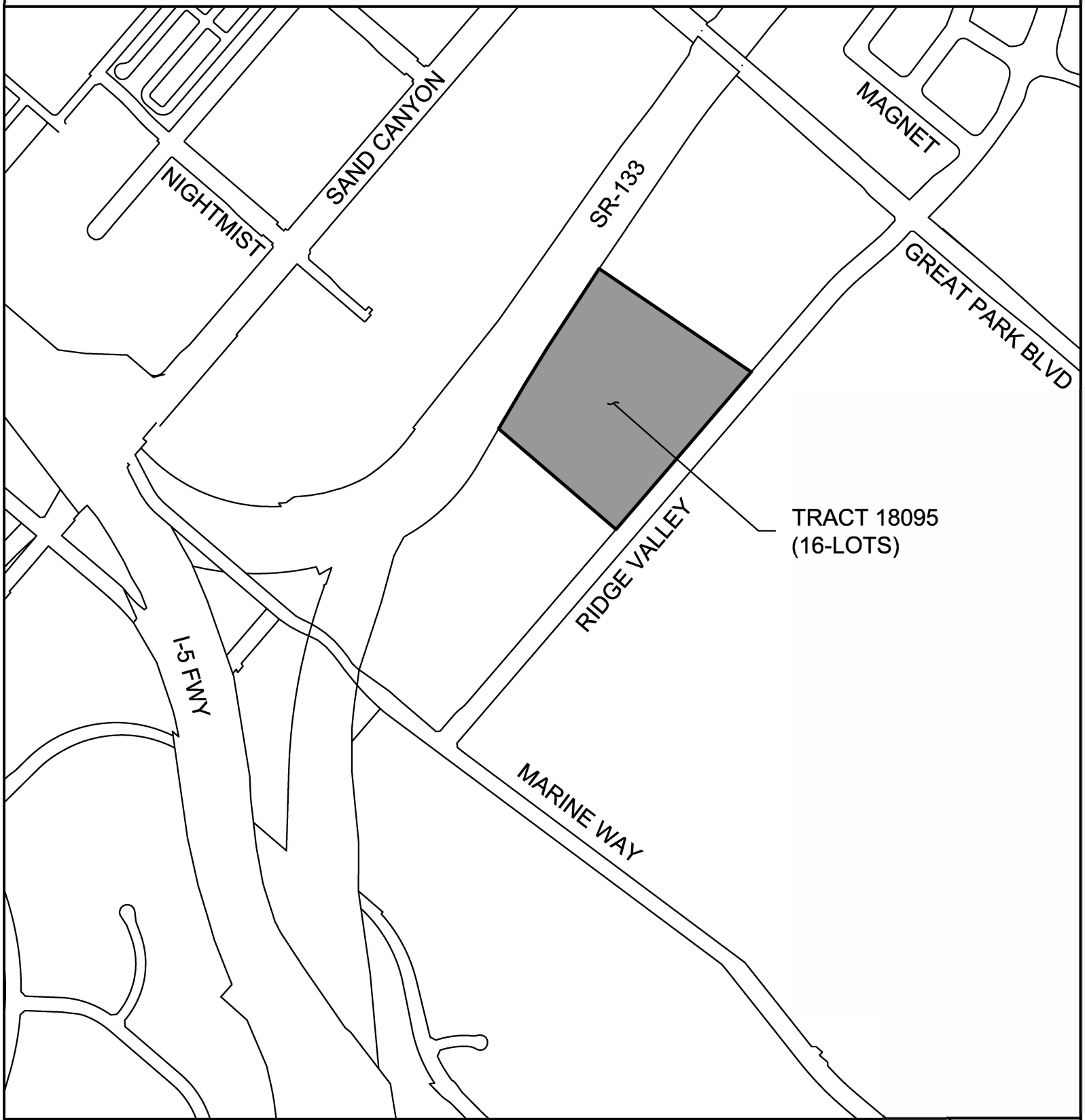
FINAL TRACT MAP No. 17863
IRVINE BUSINESS COMPLEX



SITE MAP

ATTACHMENT 2

FINAL TRACT MAP No. 18095
CYPRESS VILLAGE



SITE MAP

ATTACHMENT 3

4.10

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: SECOND READING AND ADOPTION OF ORDINANCE TO ESTABLISH CHANGES AND ADDITIONS TO POSTED SPEED LIMITS

City Clerk

City Manager

RECOMMENDED ACTION

Read by title only, second reading and adoption of ORDINANCE NO. 17-06 - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

As amended to not approve speed increases to the following roadway segments:

Roadway Segment	Location (Village)
Stone Creek S – West Yale Loop to Stone Creek N	Woodbridge
Northwood – Eastwood to Westwood	Northwood
Southwood – Eastwood to Westwood	Northwood
Eastwood – Northwood to Southwood	Northwood
Westwood – Northwood to Southwood	Northwood

EXECUTIVE SUMMARY

On August 8, 2017, the City Council introduced for first reading an ordinance to establish changes and additions to posted speed limits. The motion to introduce Ordinance No. 17-06 for first reading, as amended, carried by the following vote:

AYES:	4	COUNCILMEMBERS:	Fox, Schott, Shea and Wagner
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	1	COUNCILMEMBERS:	Lalloway
ABSTAIN:	0	COUNCILMEMBERS:	None

Unless otherwise directed by a Member of the City Council, the vote at second reading will reflect the same vote as at the first reading. However, if a Councilmember was absent at first reading, his or her vote cast at second reading will be reflected. If a Councilmember is not present at the second reading/adoption, the vote will be reflected as absent.

ATTACHMENT

City Council Ordinance No. 17-06

CITY COUNCIL ORDINANCE NO. 17-06

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

WHEREAS, California Vehicle Code Section 22357 provides that a local authority may, by ordinance, determine and declare that the speed limit on any portion of any street, other than a state highway, which would otherwise be subject to a *prima facie* speed limit of 25 miles per hour shall be increased to a *prima facie* speed limit of 30, 35, 40, 45, 50, 55, 60, or 65 miles per hour, if an engineering and traffic study indicates that such increase would facilitate the orderly movement of traffic and would be reasonable and safe; and

WHEREAS, California Vehicle Code Section 22358 provides that a local authority may, by ordinance determine and declare, that the speed limit on any portion of any street, other than a state highway, which would otherwise be subject to a *prima facie* speed limit of 65 miles per hour shall be reduced to a *prima facie* speed limit of 60, 55, 50, 45, 40, 35, 30, or 25, miles per hour, if an engineering and traffic survey indicates that the *prima facie* speed limit of 65 miles per hour is faster than what is deemed reasonable and safe; and

WHEREAS, California Vehicle Code Sections 22357 and 22358 provide that whenever a local authority has designated a *prima facie* speed limit on any portion of any street other than the *prima facie* limits applicable therein, the limits shall be effective upon the local authority erecting upon the applicable street appropriate signs giving notice thereof; and

WHEREAS, the City Council of the City of Irvine amended the Municipal Code with the adoption of Ordinance No. 01-05 removing the list of streets and *prima facie* speed limits and establishing an official list of streets and *prima facie* speed limits that shall be maintained by the City Engineer; and

WHEREAS, the City Council of the City of Irvine has considered information presented by staff, and other interested parties at a public meeting held on August 8, 2017.

ATTACHMENT

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

1. The *City of Irvine Engineering and Traffic Surveys for Speed Limits* as maintained by the City Engineer shall be amended to include *prima facie* speed limit postings in accordance with those new entries as shown in the attached Exhibit A titled the *City of Irvine Engineering and Traffic Surveys for Speed Limits*, dated August 2017.

2. This Ordinance shall be posted in accordance with the provisions of the Irvine Municipal Code and shall become effective thirty (30) days from and after the date of its passage.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the ___ day of _____, 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing ordinance was introduced for first reading on the 8th day of August, 2017, and duly adopted at a regular meeting of the City Council of the City of Irvine, held on the ___ day of _____, 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

City of Irvine Engineering and Traffic Surveys for Speed Limits
August 2017
Master List of Survey Data Results

EXHIBIT A

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Alton Pkwy	Pullman Street	Red Hill Ave	EB	45 mph	44 mph	6/25/2015	YES	
	Pullman Street	Red Hill Ave	WB	<>	<>	<>	<>	
	Red Hill Ave	Von Karman Ave	EB	50 mph	52 mph	5/23/2013	YES	
	Red Hill Ave	Von Karman Ave	WB	50 mph	51 mph	5/23/2013	YES	
	Von Karman Ave	Jamboree Rd	EB	45 mph	47 mph	7/10/2013	YES	
	Von Karman Ave	Jamboree Rd	WB	45 mph	46 mph	7/10/2013	YES	
	Jamboree Rd	Harvard Ave	EB	50 mph	46 mph	9/22/2015	YES	
	Jamboree Rd	Harvard Ave	WB	50 mph	45 mph	9/22/2015	YES	
	Harvard Ave	Culver Dr	EW	50 mph	53 mph	8/9/2016	YES	**No Change**
	Culver Dr	Lake Rd	EB	45 mph	48 mph	11/12/2015	YES	
	Culver Dr	Lake Rd	WB	45 mph	45 mph	11/12/2015	YES	
	Lake Rd	Creek Rd	EB	50 mph	48 mph	9/16/2015	YES	
	Lake Rd	Creek Rd	WB	50 mph	50 mph	9/16/2015	YES	
	Creek Rd	Jeffrey Rd	EW	50 mph	49 mph	8/8/2016	YES	**No Change**
	Jeffrey Rd	Sand Canyon Ave	EB	50 mph	49 mph	8/22/2014	YES	
	Jeffrey Rd	Sand Canyon Ave	WB	50 mph	54 mph	8/22/2014	YES	
	Sand Canyon Ave	Banting	EB	50 mph	48 mph	5/20/2015	YES	
	Sand Canyon Ave	Banting	WB	50 mph	50 mph	5/20/2015	YES	
	Banting	Irvine Center Dr	EB	50 mph	47 mph	9/17/2014	YES	
	Banting	Irvine Center Dr	WB	50 mph	46 mph	9/17/2014	YES	
	Irvine Center Dr	Technology Dr West	EB	45 mph	43 mph	5/20/2015	YES	
	Irvine Center Dr	Technology Dr West	WB	45 mph	48 mph	5/20/2015	YES	
	Technology Dr West	Barranca Pkwy	NB	55 mph	59 mph	8/25/2014	YES	
	Technology Dr West	Barranca Pkwy	SB	55 mph	57 mph	8/25/2014	YES	
	Barranca Pkwy	Jeronimo Rd	NB	50 mph	53 mph	8/26/2014	YES	
	Barranca Pkwy	Jeronimo Rd	SB	50 mph	50 mph	8/26/2014	YES	
	Jeronimo Rd	Toledo Way	NB	50 mph	52 mph	10/31/2014	YES	
	Jeronimo Rd	Toledo Way	SB	50 mph	54 mph	10/31/2014	YES	
	Toledo Way	Irvine Blvd	NB	55 mph	58 mph	6/5/2014	YES	
	Toledo Way	Irvine Blvd	SB	55 mph	57 mph	6/5/2014	YES	
	Irvine Blvd	Commercentre	NS	60 mph	64 mph	11/8/2016	YES	**No Change**
Arborwood	Canyonwood	Yale Ave	NON	35 mph	40 mph	11/15/2012	YES	
Armstrong Ave	Alton Pkwy	Barranca Pkwy	NON	40 mph	44 mph	5/10/2016	YES	**No Change**
Auto Center Dr	Oldfield	Revson	NON	30 mph	33 mph	10/9/2013	YES	
	Revson	Oldfield	NON	30 mph	32 mph	9/26/2013	YES	
Bake Parkway	Irvine Center Dr	Rockfield Blvd	NB	55 mph	47 mph	4/9/2015	YES	
	Irvine Center Dr	Rockfield Blvd	SB	55 mph	50 mph	4/9/2015	YES	
	Rockfield Blvd	Muirlands Blvd	NB	55 mph	54 mph	4/14/2015	YES	
	Rockfield Blvd	Muirlands Blvd	SB	55 mph	54 mph	4/14/2015	YES	
	Muirlands Blvd	Jeronimo Rd	NB	55 mph	53 mph	4/14/2015	YES	
	Muirlands Blvd	Jeronimo Rd	SB	55 mph	54 mph	4/14/2015	YES	
	Irvine Center Dr	Lake Forest Dr	EB	50 mph	49 mph	10/17/2013	YES	
	Irvine Center Dr	Lake Forest Dr	WB	50 mph	52 mph	10/17/2013	YES	

<> = Not Within Irvine City Limits
NON = Non-Directional (or Multi-Directional)
N/A = Not Applicable
R/R = Railroad Tracks

CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Barranca Pkwy	Red Hill Ave	Von Karman Ave	EB	50 mph	47 mph	5/9/2013	YES	
	Red Hill Ave	Von Karman Ave	WB	50 mph	52 mph	5/9/2013	YES	
	Von Karman Ave	Jamboree Rd	EB	50 mph	48 mph	10/1/2013	YES	
	Von Karman Ave	Jamboree Rd	WB	50 mph	52 mph	10/1/2013	YES	
	Jamboree Rd	Harvard Ave	EB	50 mph	48 mph	7/8/2013	YES	
	Jamboree Rd	Harvard Ave	WB	50 mph	50 mph	7/8/2013	YES	
	Harvard Ave	Culver Dr	EB	45 mph	47 mph	7/25/2013	YES	
	Harvard Ave	Culver Dr	WB	45 mph	46 mph	7/25/2013	YES	
	Culver Dr	Lake Rd	EW	45 mph	48 mph	10/6/2016	YES	**No Change**
	Lake Rd	Jeffrey Rd	EB	45 mph	46 mph	7/14/2014	YES	
	Lake Rd	Jeffrey Rd	WB	45 mph	46 mph	7/14/2014	YES	
	Jeffrey Rd	Sand Canyon Ave	EB	50 mph	47 mph	5/28/2015	YES	
	Jeffrey Rd	Sand Canyon Ave	WB	50 mph	48 mph	5/28/2015	YES	
	Sand Canyon Ave	Banting	EB	50 mph	51 mph	6/5/2014	YES	
	Sand Canyon Ave	Banting	WB	50 mph	52 mph	6/5/2014	YES	
	Banting	Irvine Center Dr	EB	50 mph	47 mph	6/13/2014	YES	
	Banting	Irvine Center Dr	WB	50 mph	46 mph	6/13/2014	YES	
	Irvine Center Dr	Technology Dr West	EB	50 mph	48 mph	7/1/2014	YES	
	Irvine Center Dr	Technology Dr West	WB	50 mph	49 mph	7/1/2014	YES	
	Technology Dr West	Ada	EB	55 mph	55 mph	7/2/2014	YES	
	Technology Dr West	Ada	WB	55 mph	52 mph	7/2/2014	YES	
	Ada	Alton Pkwy	EB	60 mph	59 mph	7/31/2014	YES	
	Ada	Alton Pkwy	WB	60 mph	58 mph	7/31/2014	YES	
Bay Tree	Trabuco Rd	Roosevelt	NB	35 mph	39 mph	12/3/2015	YES	
	Trabuco Rd	Roosevelt	SB	35 mph	39 mph	12/3/2015	YES	
	Roosevelt	Starry Iris	NB	30 mph	35 mph	12/7/2015	YES	
	Roosevelt	Starry Iris	SB	30 mph	35 mph	12/7/2015	YES	
Berkeley Ave	Harvard Ave	Campus Dr	NB	35 mph	31 mph	11/14/2012	YES	
	Harvard Ave	Campus Dr	SB	35 mph	35 mph	11/14/2012	YES	
Blue Lake North	West Yale Loop	Blue Lake	NON	30 mph	31 mph	9/10/2013	YES	
Blue Lake South	West Yale Loop	Blue Lake	NON	30 mph	35 mph	8/8/2012	YES	
Bonita Canyon Dr	SR-73 NB Off-Ramp	Shady Canyon Dr	EW	50 mph	54 mph	9/29/2016	YES	**No Change**
Bryan Ave	Jamboree Rd	El Camino Real	EB	50 mph	47 mph	5/28/2015	YES	
	Jamboree Rd	El Camino Real	WB	50 mph	51 mph	5/28/2015	YES	
	El Camino Real	Culver Dr	EB	45 mph	45 mph	7/1/2015	YES	
	El Camino Real	Culver Dr	WB	45 mph	47 mph	7/1/2015	YES	
	Culver Dr	Yale Ave	EW	45 mph	49 mph	5/5/2016	YES	**No Change**
	Yale Ave	Jeffrey Rd	EB	45 mph	46 mph	10/21/2013	YES	
	Yale Ave	Jeffrey Rd	WB	45 mph	47 mph	10/21/2013	YES	
Business Center Dr	MacArthur Blvd	End	NON		34 mph	12/15/2016	YES	**35 mph**
California Ave	Academy	Innovation	NB	45 mph	50 mph	8/26/2015	YES	
	Academy	Innovation	SB	45 mph	46 mph	8/26/2015	YES	
	Innovation	Theory	NS	45 mph	49 mph	10/14/2016	YES	**No Change**

<> = Not Within Irvine City Limits
NON = Non-Directional (or Multi-Directional)
N/A = Not Applicable
R/R = Railroad Tracks

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Campus Dr	MacArthur Blvd	Von Karman Ave	EB	<>	<>	<>	<>	
	MacArthur Blvd	Von Karman Ave	WB	40 mph	41 mph	11/25/2015	YES	
	Von Karman Ave	Jamboree Rd	EB	<>	<>	<>	<>	
	Von Karman Ave	Jamboree Rd	WB	45 mph	44 mph	4/15/2015	YES	
	Jamboree Rd	Carlson Ave	EB	45 mph	48 mph	9/8/2014	YES	
	Jamboree Rd	Carlson Ave	WB	45 mph	44 mph	9/8/2014	YES	
	Carlson Ave	University Dr	EB	55 mph	54 mph	9/30/2014	YES	
	Carlson Ave	University Dr	WB	55 mph	57 mph	9/30/2014	YES	
	University Dr	Bridge Rd	EB	45 mph	46 mph	6/24/2014	YES	
	University Dr	Bridge Rd	WB	45 mph	47 mph	6/24/2014	YES	
	Bridge Rd	Berkeley Ave	EB	45 mph	44 mph	7/16/2013	YES	
	Bridge Rd	Berkeley Ave	WB	45 mph	41 mph	7/16/2013	YES	
	Berkeley Ave	California Ave	EB	45 mph	42 mph	8/7/2013	YES	
	Berkeley Ave	California Ave	WB	45 mph	43 mph	8/7/2013	YES	
	California Ave	Culver Dr	EB	45 mph	45 mph	9/11/2013	YES	
	California Ave	Culver Dr	WB	45 mph	44 mph	9/11/2013	YES	
	Culver Dr	Turtle Rock Dr	EW	45 mph	45 mph	8/9/2016	YES	**No Change**
Carlson Ave	Campus Dr	Palatine	NB	50 mph	50 mph	7/15/2013	YES	
	Campus Dr	Palatine	SB	50 mph	49 mph	7/15/2013	YES	
	Palatine	Michelson Dr	NB	45 mph	46 mph	7/15/2013	YES	
	Palatine	Michelson Dr	SB	45 mph	40 mph	7/15/2013	YES	
Chesapeake	Shiloh	Atlanta	EB	25 mph	32 mph	12/2/2013	YES	
	Shiloh	Atlanta	WB	25 mph	32 mph	12/2/2013	YES	
Construction Circle E	Construction South	Construction North	NB	35 mph	36 mph	8/8/2014	YES	
	Construction South	Construction North	SB	35 mph	35 mph	8/8/2014	YES	
Construction Circle W	Construction North	Construction South	NB	35 mph	34 mph	11/30/2015	YES	
	Construction North	Construction South	SB	35 mph	33 mph	11/30/2015	YES	
Cornell	Berkeley Ave	Campus Dr	NON	30 mph	29 mph	5/28/2014	YES	
Creek Rd	Alton Pkwy	Barranca Pkwy	NB	35 mph	37 mph	5/27/2015	YES	
	Alton Pkwy	Barranca Pkwy	SB	35 mph	37 mph	5/27/2015	YES	
Crested Bird	Groveland	Medallion	EW	35 mph	35 mph	10/13/2016	YES	**No Change**

<> = Not Within Irvine City Limits
NON = Non-Directional (or Multi-Directional)
N/A = Not Applicable
R/R = Railroad Tracks

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Culver Dr	Shady Canyon Dr	Vista Del Campo	NS	55 mph	58 mph	10/21/2016	YES	**No Change**
	Vista Del Campo	Campus Dr	NS	50 mph	53 mph	10/21/2016	YES	**No Change**
	Campus Dr	University Dr	NB	50 mph	45 mph	7/17/2013	YES	
	Campus Dr	University Dr	SB	50 mph	49 mph	7/17/2013	YES	
	University Dr	Michelson Dr	NB	45 mph	49 mph	7/11/2013	YES	
	University Dr	Michelson Dr	SB	45 mph	48 mph	7/11/2013	YES	
	Michelson Dr	I-405 NB Ramps	NB	45 mph	46 mph	7/17/2013	YES	
	Michelson Dr	I-405 NB Ramps	SB	45 mph	48 mph	7/17/2013	YES	
	I-405 NB Ramps	Main Street	NB	50 mph	53 mph	7/30/2013	YES	
	I-405 NB Ramps	Main Street	SB	50 mph	52 mph	7/30/2013	YES	
	Main Street	Alton Pkwy	NB	50 mph	53 mph	6/27/2013	YES	
	Main Street	Alton Pkwy	SB	50 mph	52 mph	6/27/2013	YES	
	Alton Pkwy	Barranca Pkwy	NB	45 mph	44 mph	9/10/2013	YES	
	Alton Pkwy	Barranca Pkwy	SB	45 mph	46 mph	9/10/2013	YES	
	Barranca Pkwy	Warner Ave	NB	50 mph	51 mph	7/12/2013	YES	
	Barranca Pkwy	Warner Ave	SB	50 mph	53 mph	7/12/2013	YES	
	Warner Ave	Irvine Center Dr	NB	55 mph	53 mph	8/13/2014	YES	
	Warner Ave	Irvine Center Dr	SB	55 mph	53 mph	8/13/2014	YES	
	Irvine Center Dr	Deerfield Ave	NB	50 mph	47 mph	8/5/2014	YES	
	Irvine Center Dr	Deerfield Ave	SB	50 mph	45 mph	8/5/2014	YES	
	Deerfield Ave	Walnut Ave	NB	55 mph	54 mph	6/13/2014	YES	
	Deerfield Ave	Walnut Ave	SB	55 mph	54 mph	6/13/2014	YES	
	Walnut Ave	I-5 SB Ramps	NB	45 mph	48 mph	9/29/2015	YES	
	Walnut Ave	I-5 SB Ramps	SB	45 mph	48 mph	9/29/2015	YES	
	I-5 SB Ramps	Bryan Ave	NB	50 mph	51 mph	8/20/2014	YES	
	I-5 SB Ramps	Bryan Ave	SB	50 mph	52 mph	8/20/2014	YES	
	Bryan Ave	Irvine Blvd	NB	50 mph	50 mph	8/21/2014	YES	
	Bryan Ave	Irvine Blvd	SB	50 mph	53 mph	8/21/2014	YES	
	Irvine Blvd	Meadowood	NB	55 mph	54 mph	8/22/2014	YES	
	Irvine Blvd	Meadowood	SB	55 mph	55 mph	5/29/2015	YES	
Culver Dr	Meadowood	Portola Pkwy	NB	50 mph	51 mph	5/17/2013	YES	
	Meadowood	Portola Pkwy	SB	50 mph	50 mph	5/17/2013	YES	
Deerfield Ave	Harvard Ave	Culver Dr	NON	30 mph	32 mph	8/20/2013	YES	
	Culver Dr	Yale Ave	EB	30 mph	32 mph	5/16/2013	YES	
	Culver Dr	Yale Ave	WB	30 mph	33 mph	5/16/2013	YES	
Dovecreek	Royal Oak	Valley Oak	EB	35 mph	36 mph	10/25/2012	YES	
	Royal Oak	Valley Oak	WB	35 mph	37 mph	10/25/2012	YES	
Dupont	Michelson Dr	Von Karman Ave	EW	35 mph	41 mph	10/19/2016	YES	**40 mph**
	Von Karman Ave	Jamboree Rd	EW	40 mph	44 mph	12/2/2016	YES	**No Change**
Eastshore	Woodspring	East Yale Loop	NON	35 mph	37 mph	9/28/2015	YES	
Eastwood	Northwood	Southwood	NB	35 mph	35 mph	1/13/2012	YES	
	Northwood	Southwood	SB	35 mph	37 mph	1/13/2012	YES	
East Yale Loop	Yale Ave North	Barranca Pkwy	NB	40 mph	41 mph	9/4/2013	YES	
	Yale Ave North	Barranca Pkwy	SB	40 mph	40 mph	9/4/2013	YES	
	Barranca Pkwy	Alton Pkwy	NB	40 mph	43 mph	5/12/2016	YES	**No Change**
	Barranca Pkwy	Alton Pkwy	SB	40 mph	42 mph	5/12/2016	YES	**No Change**
	Alton Pkwy	Yale Ave South	N/S	40 mph	44 mph	5/16/2016	YES	**No Change**
El Camino Real	Jamboree Rd	SR-261	EB	40 mph	37 mph	8/20/2015	YES	
	Jamboree Rd	SR-261	WB	40 mph	36 mph	8/20/2015	YES	
	SR-261	Commerce	EB	45 mph	45 mph	7/2/2014	YES	
	SR-261	Commerce	WB	45 mph	46 mph	7/2/2014	YES	

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Gillette Ave	Main Street	Armstrong Ave	NON	40 mph	45 mph	11/9/2016	YES	**No Change** [1]
Great Park Blvd (Formerly Trabuco Rd)	Sand Canyon Ave	Ridge Valley	EW	50 mph	50 mph	10/7/2016	YES	**No Change**
Groveland	Irvine Blvd	Spring Meadow	NB	35 mph	33 mph	12/3/2013	YES	
	Irvine Blvd	Spring Meadow	SB	35 mph	33 mph	12/3/2013	YES	
Hallmark	Crossland	Regal	NS		38 mph	12/9/2016	YES	**35 mph**
Harvard Ave	Culver Dr	Berkeley Ave	EB	40 mph	44 mph	1/3/2013	YES	
	Culver Dr	Berkeley Ave	WB	40 mph	42 mph	1/3/2013	YES	
	Berkeley Ave	University Dr	EB	45 mph	43 mph	11/4/2014	YES	
	Berkeley Ave	University Dr	WB	45 mph	43 mph	11/4/2014	YES	
	University Dr	Michelson Dr	NB	50 mph	52 mph	7/10/2014	YES	
	University Dr	Michelson Dr	SB	50 mph	51 mph	7/10/2014	YES	
	Michelson Dr	Main Street	NB	45 mph	46 mph	8/27/2015	YES	
	Michelson Dr	Main Street	SB	45 mph	46 mph	8/27/2015	YES	
	Main Street	Barranca Pkwy	NB	50 mph	48 mph	9/17/2014	YES	
	Main Street	Barranca Pkwy	SB	50 mph	52 mph	9/17/2014	YES	
	Barranca Pkwy	Irvine Center Dr	NB	50 mph	50 mph	10/1/2014	YES	
	Barranca Pkwy	Irvine Center Dr	SB	50 mph	51 mph	10/1/2014	YES	
	Irvine Center Dr	Walnut Ave	NB	45 mph	47 mph	10/1/2015	YES	
	Irvine Center Dr	Walnut Ave	SB	45 mph	47 mph	10/1/2015	YES	
Hicks Canyon Dr	Kara	Yale Ave	NON	35 mph	37 mph	11/18/2015	YES	
Irvine Blvd	Jamboree Rd	Marketplace	EB	50 mph	47 mph	9/1/2015	YES	
	Jamboree Rd	Marketplace	WB	50 mph	45 mph	9/1/2015	YES	
	Marketplace	SR-261 NB Ramps	EB	50 mph	51 mph	8/25/2015	YES	
	Marketplace	SR-261 NB Ramps	WB	50 mph	53 mph	8/25/2015	YES	
	SR-261 NB Ramps	Culver Dr	EB	50 mph	53 mph	8/31/2015	YES	
	SR-261 NB Ramps	Culver Dr	WB	50 mph	51 mph	8/31/2015	YES	
	Culver Dr	Yale Ave	EB	55 mph	54 mph	7/11/2014	YES	
	Culver Dr	Yale Ave	WB	55 mph	55 mph	7/11/2014	YES	
	Yale Ave	Jeffrey Rd	EB	55 mph	50 mph	10/1/2014	YES	
	Yale Ave	Jeffrey Rd	WB	55 mph	56 mph	10/1/2014	YES	
	Jeffrey Rd	Sand Canyon Ave	EW	55 mph	55 mph	5/18/2016	YES	**No Change**
	Sand Canyon Ave	Pusan Way	EB	60 mph	58 mph	8/13/2013	YES	
	Sand Canyon Ave	Pusan Way	WB	60 mph	58 mph	8/13/2013	YES	
	Pusan Way	Alton Pkwy	EB	65 mph	64 mph	7/31/2013	YES	
	Pusan Way	Alton Pkwy	WB	65 mph	66 mph	7/31/2013	YES	
	Alton Pkwy	Bake Pkwy	EB	55 mph	53 mph	8/27/2014	YES	
	Alton Pkwy	Bake Pkwy	WB	55 mph	52 mph	8/27/2014	YES	

Footnote:
[1] Gillette is a local collector street in a mixed-use area. The roadway characteristics include two-way traffic, two 90-degree street bends, business driveways, and no parking allowed on street except on Sundays for religious events. The roadway does not include on-street bike lanes, off-street bike lanes or sidewalks for bicycle and pedestrian use. Therefore, bicyclists and pedestrians potentially may use the roadway as a path of travel. It is the opinion of the Registered Civil Engineer that the lack of sidewalk and potential for bicyclists or pedestrians to be traveling in the roadway constitutes a Condition Not Readily Apparent to Motorists. Therefore, a five (5) mph reduction has been applied.

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AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Irvine Center Dr	Harvard Ave	Culver Dr	EB	50 mph	49 mph	8/28/2014	YES	
	Harvard Ave	Culver Dr	WB	50 mph	50 mph	8/28/2014	YES	
	Culver Dr	Yale Ave	EB	55 mph	54 mph	9/10/2014	YES	
	Culver Dr	Yale Ave	WB	55 mph	56 mph	9/10/2014	YES	
	Yale Ave	Jeffrey Rd	EB	55 mph	56 mph	8/27/2014	YES	
	Yale Ave	Jeffrey Rd	WB	55 mph	54 mph	8/27/2014	YES	
	Jeffrey Rd	Orangetree	EB	50 mph	52 mph	10/8/2014	YES	
	Jeffrey Rd	Orangetree	WB	50 mph	51 mph	10/8/2014	YES	
	Orangetree	Sand Canyon Ave	EB	50 mph	46 mph	11/14/2014	YES	
	Orangetree	Sand Canyon Ave	WB	50 mph	52 mph	11/14/2014	YES	
	Sand Canyon Ave	Barranca Pkwy	EB	50 mph	51 mph	8/28/2014	YES	
	Sand Canyon Ave	Barranca Pkwy	WB	50 mph	54 mph	8/28/2014	YES	
	Barranca Pkwy	I-405 SB Ramps	EB	50 mph	45 mph	9/10/2014	YES	
	Barranca Pkwy	I-405 SB Ramps	WB	50 mph	46 mph	9/10/2014	YES	
	I-405 SB Ramps	Bake Pkwy	EB	50 mph	51 mph	11/19/2014	YES	
	I-405 SB Ramps	Bake Pkwy	WB	50 mph	50 mph	11/19/2014	YES	
	Bake Pkwy	Scientific	EB	50 mph	50 mph	8/27/2015	YES	
	Bake Pkwy	Scientific	WB	50 mph	51 mph	8/27/2015	YES	
	Scientific	Lake Forest Dr	EB	45 mph	44 mph	9/2/2015	YES	
	Scientific	Lake Forest Dr	WB	45 mph	50 mph	9/2/2015	YES	
Jamboree Rd	MacArthur Blvd	Campus Dr	NB	50 mph	52 mph	9/5/2013	YES	
	MacArthur Blvd	Campus Dr	SB	<>	<>	<>	<>	
	Campus Dr	Michelson Dr	NB	50 mph	52 mph	9/12/2013	YES	
	Campus Dr	Michelson Dr	SB	50 mph	47 mph	9/12/2013	YES	
	Michelson Dr	Main Street	NB	50 mph	48 mph	9/30/2015	YES	
	Michelson Dr	Main Street	SB	50 mph	44 mph	9/30/2015	YES	
	Main Street	Barranca Pkwy	NB	50 mph	49 mph	9/6/2013	YES	
	Main Street	Barranca Pkwy	SB	50 mph	48 mph	9/6/2013	YES	
	Barranca Pkwy	City Limit	NB	<>	<>	<>	<>	
	Barranca Pkwy	City Limit	SB	<>	<>	<>	<>	
	City Limit	City Limit @ R/R	NB	<>	<>	<>	<>	
	City Limit	City Limit @ R/R	SB	<>	<>	<>	<>	
	City Limit @ R/R	Walnut Ave	NB	65 mph	69 mph	11/10/2010	YES	
	City Limit @ R/R	Walnut Ave	SB	65 mph	67 mph	11/10/2010	YES	
	Walnut Ave	Michelle Dr	NB	<>	<>	<>	<>	
	Walnut Ave	Michelle Dr	SB	<>	<>	<>	<>	
	Michelle Dr	I-5 NB Ramp	NB	<>	<>	<>	<>	
	Michelle Dr	I-5 NB Ramp	SB	<>	<>	<>	<>	

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Jeffrey Rd	I-405 SB Ramp	Alton Pkwy	NB	50 mph	50 mph	4/16/2015	YES	
	I-405 SB Ramp	Alton Pkwy	SB	50 mph	54 mph	4/16/2015	YES	
	Alton Pkwy	Barranca Pkwy	NB	50 mph	52 mph	6/26/2014	YES	
	Alton Pkwy	Barranca Pkwy	SB	50 mph	50 mph	6/26/2014	YES	
	Barranca Pkwy	Irvine Center Dr	NB	50 mph	51 mph	6/1/2015	YES	
	Barranca Pkwy	Irvine Center Dr	SB	50 mph	53 mph	6/1/2015	YES	
	Irvine Center Dr	I-5 SB Ramp	NB	50 mph	54 mph	6/3/2015	YES	
	Irvine Center Dr	I-5 SB Ramp	SB	50 mph	54 mph	6/3/2015	YES	
	I-5 SB Ramps	Roosevelt	NS	50 mph	54 mph	11/8/2016	YES	**No Change**
	Roosevelt	Trabuco Rd	NS	50 mph	52 mph	11/9/2016	YES	**No Change**
	Trabuco Rd	Bryan Ave	NB	50 mph	52 mph	7/8/2015	YES	
	Trabuco Rd	Bryan Ave	SB	50 mph	52 mph	7/8/2015	YES	
	Bryan Ave	Irvine Blvd	NS	55 mph	53 mph	8/10/2016	YES	**50 mph**
	Irvine Blvd	Encore	NB	60 mph	54 mph	6/2/2015	YES	
	Irvine Blvd	Encore	SB	60 mph	58 mph	6/2/2015	YES	
	Encore	Portola Pkwy	NB	60 mph	56 mph	10/29/2015	YES	
	Encore	Portola Pkwy	SB	60 mph	51 mph	10/29/2015	YES	
Jeronimo Rd	Alton Pkwy	Bake Pkwy	EB	50 mph	52 mph	6/30/2014	YES	
	Alton Pkwy	Bake Pkwy	WB	50 mph	50 mph	6/30/2014	YES	
Jordan Ave	Michelson Dr	Jordan East	NS	30 mph	31 mph	12/21/2016	YES	**No Change**
Jordan East	Jordan Ave	Michelson Dr	NB	30 mph	31 mph	11/23/2015	YES	
	Jordan Ave	Michelson Dr	SB	30 mph	32 mph	11/23/2015	YES	
Knollcrest W	Quail Hill Pkwy	Radiance	NON	35 mph	38 mph	8/13/2013	YES	
Knollcrest	Radiance	Pine Needles	NON	35 mph	39 mph	7/18/2013	YES	
Knollcrest E	Pine Needles	Quail Hill Pkwy	NON	35 mph	38 mph	7/30/2013	YES	
Laguna Canyon Rd	City Limit	SR-133	NB	<>	<>	<>	<>	
	City Limit	SR-133	SB	<>	<>	<>	<>	
	SR-133	Quail Hill Pkwy	NS	50 mph	52 mph	10/6/2016	YES	**No Change**
	Quail Hill Pkwy	Alton Pkwy	NS	50 mph	51 mph	10/6/2016	YES	**No Change**
	Alton Pkwy	Barranca Pkwy	NB	45 mph	42 mph	6/25/2014	YES	
	Alton Pkwy	Barranca Pkwy	SB	45 mph	43 mph	6/25/2014	YES	
	Barranca Pkwy	Irvine Center Dr	NB	45 mph	43 mph	10/6/2014	YES	
	Barranca Pkwy	Irvine Center Dr	SB	45 mph	46 mph	10/6/2014	YES	
Lake Rd	Alton Pkwy	Barranca Pkwy	NB	25 mph	N/A	N/A	YES	
	Alton Pkwy	Barranca Pkwy	SB	25 mph	N/A	N/A	YES	
Lake Forest Dr	SR-133	Tesla	EB	55 mph	55 mph	10/16/2013	YES	
	SR-133	Tesla	WB	55 mph	59 mph	10/16/2013	YES	
Landmark	Journey / Townsend	Crossland / Hallmark	NS		31 mph	12/20/2016	YES	**30 mph**
MacArthur Blvd	SR-73	Jamboree Rd	NB	60 mph	63 mph	8/14/2013	YES	
	SR-73	Jamboree Rd	SB	60 mph	64 mph	8/14/2013	YES	
	Jamboree Rd	Campus Dr	NB	<>	<>	<>	<>	
	Jamboree Rd	Campus Dr	SB	<>	<>	<>	<>	
	Campus Dr	Michelson Dr	NB	45 mph	47 mph	7/23/2013	YES	
	Campus Dr	Michelson Dr	SB	45 mph	50 mph	7/23/2013	YES	
	Michelson Dr	I-405 SB Ramps	NB	45 mph	49 mph	8/8/2013	YES	
	Michelson Dr	I-405 SB Ramps	SB	45 mph	45 mph	8/8/2013	YES	
	I-405 SB Ramps	Red Hill Ave	EB	50 mph	50 mph	7/22/2013	YES	
	I-405 SB Ramps	Red Hill Ave	WB	50 mph	52 mph	7/22/2013	YES	
	Red Hill Ave	SR-55 NB Ramps	EB	45 mph	49 mph	7/24/2013	YES	
	Red Hill Ave	SR-55 NB Ramps	WB	45 mph	49 mph	7/24/2013	YES	

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Main Street	SR-55	MacArthur Blvd	EB	45 mph	47 mph	8/6/2013	YES	
	SR-55	MacArthur Blvd	WB	45 mph	49 mph	8/6/2013	YES	
	MacArthur Blvd	Jamboree Rd	EB	45 mph	44 mph	8/7/2013	YES	
	MacArthur Blvd	Jamboree Rd	WB	45 mph	43 mph	8/7/2013	YES	
	Jamboree Rd	Harvard Ave	EB	45 mph	46 mph	6/27/2014	YES	
	Jamboree Rd	Harvard Ave	WB	45 mph	48 mph	6/27/2014	YES	
	Harvard Ave	Paseo Westpark	EB	50 mph	51 mph	4/14/2015	YES	
	Harvard Ave	Paseo Westpark	WB	50 mph	49 mph	4/14/2015	YES	
	Paseo Westpark	Culver Dr	EB	50 mph	48 mph	6/26/2014	YES	
	Paseo Westpark	Culver Dr	WB	50 mph	49 mph	6/26/2014	YES	
McGaw Ave	Pullman St	Von Karman Ave	EB	45 mph	45 mph	9/10/2015	YES	
	Pullman St	Von Karman Ave	WB	45 mph	47 mph	9/10/2015	YES	
	Von Karman Ave	Murphy Ave	EB	45 mph	45 mph	7/30/2014	YES	
	Von Karman Ave	Murphy Ave	WB	45 mph	44 mph	7/30/2014	YES	
Meadowood	Culver Dr	Citrusglen	EW	45 mph	45 mph	10/13/2016	YES	**No Change**
Michelson Dr	MacArthur Blvd	Von Karman Ave	EB	40 mph	41 mph	8/6/2013	YES	
	MacArthur Blvd	Von Karman Ave	WB	40 mph	41 mph	8/6/2013	YES	
	Von Karman Ave	Jamboree Rd	EB	45 mph	45 mph	9/20/2013	YES	
	Von Karman Ave	Jamboree Rd	WB	45 mph	43 mph	9/20/2013	YES	
	Jamboree Rd	Harvard Ave	EB	45 mph	47 mph	10/4/2013	YES	
	Jamboree Rd	Harvard Ave	WB	45 mph	45 mph	10/4/2013	YES	
	Harvard Ave	Culver Dr	EB	45 mph	47 mph	10/3/2013	YES	
	Harvard Ave	Culver Dr	WB	45 mph	43 mph	10/3/2013	YES	
	Culver Dr	Sandburg/Seton Rd	EB	35 mph	39 mph	11/5/2015	YES	
	Culver Dr	Sandburg/Seton Rd	WB	35 mph	40 mph	11/5/2015	YES	
	Sandburg/Seton Rd	Redwood Tree Ln	EW	35 mph	39 mph	10/4/2016	YES	**No change**
	Redwood Tree Ln	Yale Ave	EB	35 mph	36 mph	10/6/2015	YES	
	Redwood Tree Ln	Yale Ave	WB	35 mph	38 mph	10/6/2015	YES	
	Yale Ave	University Dr	EB	35 mph	36 mph	11/12/2015	YES	
	Yale Ave	University Dr	WB	35 mph	39 mph	11/12/2015	YES	
Millikan Ave	Alton Pkwy	Barranca Pkwy	NS		42 mph	12/2/2016	YES	**40 mph**
Modjeska	Irvine Blvd	Walking Stick	NB	55 mph	54 mph	9/5/2013	YES	
	Irvine Blvd	Walking Stick	SB	55 mph	51 mph	9/5/2013	YES	
	Walking Stick	Portola Springs	NB	45 mph	39 mph	11/25/2015	YES	
	Walking Stick	Portola Springs	SB	45 mph	45 mph	8/27/2014	YES	
Muirlands Blvd	Alton Pkwy	Bake Pkwy	EB	50 mph	52 mph	7/1/2014	YES	
	Alton Pkwy	Bake Pkwy	WB	50 mph	50 mph	7/1/2014	YES	
Newport Coast Dr	Bonita Canyon Dr	SR-73	NS	55 mph	57 mph	9/29/2016	YES	**No Change**
Nightmist	Rush Lily	Tulip	EB	25 mph	32 mph	1/22/2016	YES	
	Rush Lily	Tulip	WB	25 mph	32 mph	1/22/2016	YES	
	Tulip	Sand Canyon Ave	EB	30 mph	35 mph	1/22/2016	YES	
	Tulip	Sand Canyon Ave	WB	30 mph	35 mph	1/22/2016	YES	
Northwood	Eastwood	Westwood	EB	35 mph	38 mph	1/13/2012	YES	
	Eastwood	Westwood	WB	35 mph	36 mph	1/13/2012	YES	
Pacifica	Alton Pkwy	Irvine Center Dr	NON		46 mph	12/6/2016	YES	**45 mph**
Park Place	Yale Ave	Kara	NON	40 mph	41 mph	10/18/2016	YES	**No Change**
Paseo Westpark	Harvard Ave	Warner Ave	EW	40 mph	35 mph	8/10/2016	YES	**35 mph**
	Warner Ave	Barranca Pkwy	NB	40 mph	42 mph	7/22/2015	YES	
	Warner Ave	Barranca Pkwy	SB	40 mph	40 mph	7/22/2015	YES	
Portola Springs	Portola Pkwy	Long Grass	NB	35 mph	40 mph	8/14/2013	YES	
	Portola Pkwy	Long Grass	SB	35 mph	38 mph	8/14/2013	YES	
	Long Grass	Modjeska	NB	40 mph	41 mph	9/24/2013	YES	
	Long Grass	Modjeska	SB	40 mph	38 mph	9/24/2013	YES	

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Portola Pkwy	SR-261 NB Ramps	Culver Dr	EB	50 mph	52 mph	6/25/2013	YES	
	SR-261 NB Ramps	Culver Dr	WB	50 mph	54 mph	6/25/2013	YES	
	Culver Dr	Yale Ave	EB	55 mph	53 mph	6/19/2013	YES	
	Culver Dr	Yale Ave	WB	55 mph	58 mph	6/19/2013	YES	
	Yale Ave	Jeffrey Rd	EB	55 mph	56 mph	6/20/2013	YES	
	Yale Ave	Jeffrey Rd	WB	55 mph	58 mph	6/20/2013	YES	
	Jeffrey Rd	Bee Canyon	EB	55 mph	58 mph	1/7/2015	YES	
	Jeffrey Rd	Bee Canyon	WB	55 mph	56 mph	1/7/2015	YES	
	Bee Canyon	Sand Canyon Ave	EB	55 mph	54 mph	11/5/2012	YES	
	Bee Canyon	Sand Canyon Ave	WB	55 mph	56 mph	11/5/2012	YES	
	Sand Canyon Ave	Arrowhead	EB	50 mph	53 mph	11/2/2012	YES	
	Sand Canyon Ave	Arrowhead	WB	50 mph	53 mph	11/2/2012	YES	
	Arrowhead	Ridge Valley	EB	50 mph	50 mph	9/11/2012	YES	
	Arrowhead	Ridge Valley	WB	50 mph	52 mph	9/11/2012	YES	
	Ridge Valley	Portola Springs	EB	50 mph	53 mph	9/20/2012	YES	
	Ridge Valley	Portola Springs	WB	50 mph	53 mph	9/20/2012	YES	
	Portola Springs	SR-241	EB	50 mph	52 mph	10/7/2015	YES	
	Portola Springs	SR-241	WB	50 mph	53 mph	10/7/2015	YES	
Quail Hill Pkwy	Shady Canyon Dr	Knollcrest W	EB	45 mph	47 mph	7/18/2013	YES	
	Shady Canyon Dr	Knollcrest W	WB	45 mph	45 mph	7/18/2013	YES	
	Knollcrest W	Knollcrest E	EB	45 mph	47 mph	6/18/2013	YES	
	Knollcrest W	Knollcrest E	WB	45 mph	48 mph	6/18/2013	YES	
	Knollcrest E	Laguna Canyon Rd	EB	45 mph	48 mph	6/25/2013	YES	
	Knollcrest E	Laguna Canyon Rd	WB	45 mph	47 mph	6/25/2013	YES	
Red Hill Ave	Main Street	MacArthur Blvd	NB	50 mph	48 mph	8/25/2014	YES	
	Main Street	MacArthur Blvd	SB	50 mph	49 mph	8/25/2014	YES	
	MacArthur Blvd	Barranca Pkwy	NB	50 mph	50 mph	10/3/2014	YES	
	MacArthur Blvd	Barranca Pkwy	SB	50 mph	52 mph	10/3/2014	YES	
Regal	Hallmark	Vintage	EW		39 mph	12/9/2016	YES	**35 mph**
Research Dr	Irvine Center Dr	Bake Pkwy	NB	45 mph	47 mph	4/21/2015	YES	
	Irvine Center Dr	Bake Pkwy	SB	45 mph	47 mph	4/21/2015	YES	
	Bake Pkwy	City Limit	NB	50 mph	48 mph	9/28/2015	YES	
	Bake Pkwy	City Limit	SB	50 mph	48 mph	9/28/2015	YES	
Ridgeline Dr	Turtle Rock	University Dr	NB	50 mph	60 mph	9/28/2015	YES	
	Turtle Rock	University Dr	SB	50 mph	58 mph	9/28/2015	YES	
	Hillcrest	Turtle Rock Dr	NON		39 mph	12/12/2016	YES	**35 mph**
Ridge Valley	Portola Pkwy	Port/Cienega	NB	35 mph	38 mph	1/22/2016	YES	
	Portola Pkwy	Port/Cienega	SB	35 mph	38 mph	1/22/2016	YES	
	Port/Cienega	Irvine Blvd	NB	45 mph	50 mph	1/22/2016	YES	
	Port/Cienega	Irvine Blvd	SB	45 mph	50 mph	1/22/2016	YES	
Rockfield Blvd	Thomas	Bake Pkwy	EB	45 mph	43 mph	9/15/2015	YES	
	Thomas	Bake Pkwy	WB	45 mph	43 mph	9/15/2015	YES	
	Bake Pkwy	East City Limit	EB	45 mph	43 mph	9/24/2015	YES	
	Bake Pkwy	East City Limit	WB	45 mph	44 mph	9/24/2015	YES	

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Roosevelt	Monroe	Yale Ave	EB	40 mph	41 mph	4/20/2015	YES	
	Monroe	Yale Ave	WB	40 mph	43 mph	4/20/2015	YES	
	Yale Ave	Jeffrey Rd	EB	40 mph	43 mph	9/3/2015	YES	
	Yale Ave	Jeffrey Rd	WB	40 mph	43 mph	9/3/2015	YES	
	Jeffrey Rd	Visions	EB	35 mph	41 mph	1/19/2016	YES	
	Jeffrey Rd	Visions	WB	35 mph	41 mph	1/19/2016	YES	
	Visions	Bay Tree	EB	35 mph	42 mph	1/19/2016	YES	
	Visions	Bay Tree	WB	35 mph	42 mph	1/19/2016	YES	
	Bay Tree	Tulip	EB	30 mph	35 mph	12/2/2015	YES	
	Bay Tree	Tulip	WB	30 mph	35 mph	12/2/2015	YES	
	Tulip	Sand Canyon Ave	EB	35 mph	39 mph	1/26/2016	YES	
	Tulip	Sand Canyon Ave	WB	35 mph	39 mph	1/26/2016	YES	
Royce Rd (West)	Michelson Dr	Yale Ave	EB	30 mph	31 mph	12/3/2013	YES	
	Michelson Dr	Yale Ave	WB	30 mph	31 mph	12/3/2013	YES	
Royce Rd (East)	Yale Ave	Michelson Dr	EB	30 mph	29 mph	9/24/2013	YES	
	Yale Ave	Michelson Dr	WB	30 mph	28 mph	9/24/2013	YES	
Rush Lily	Roosevelt	Nightmist	NB	25 mph	30 mph	12/9/2015	YES	
	Roosevelt	Nightmist	SB	25 mph	30 mph	12/9/2015	YES	
Sand Canyon Ave	Alton Pkwy	Barranca Pkwy	NB	50 mph	49 mph	8/14/2014	YES	
	Alton Pkwy	Barranca Pkwy	SB	50 mph	48 mph	8/14/2014	YES	
	Barranca Pkwy	Irvine Center Dr	NB	50 mph	49 mph	6/30/2014	YES	
	Barranca Pkwy	Irvine Center Dr	SB	50 mph	51 mph	6/30/2014	YES	
	Irvine Center Dr	Oak Canyon	NB	50 mph	49 mph	8/4/2015	YES	
	Irvine Center Dr	Oak Canyon	SB	50 mph	50 mph	8/4/2015	YES	
	Oak Canyon	Marine Way	NB	50 mph	49 mph	10/6/2015	YES	
	Oak Canyon	Marine Way	SB	50 mph	51 mph	10/6/2015	YES	
	Marine Way	Trabuco Rd	NB	55 mph	55 mph	10/7/2015	YES	
	Marine Way	Trabuco Rd	SB	55 mph	52 mph	10/7/2015	YES	
	Trabuco Rd	Irvine Blvd	NB	55 mph	56 mph	9/1/2015	YES	
	Trabuco Rd	Irvine Blvd	SB	55 mph	55 mph	9/1/2015	YES	
	Irvine Blvd	Portola Pkwy	NS	55 mph	53 mph	12/5/2016	YES	**50 mph**
San Leon	Harvard Ave	San Remo	NON	30 mph	31 mph	6/26/2013	YES	
San Marino	Harvard Ave	San Carlo	NON	35 mph	39 mph	7/13/2012	YES	
	San Carlo	Paseo Westpark	EB	30 mph	38 mph	9/23/2015	YES	
	San Carlo	Paseo Westpark	WB	30 mph	35 mph	9/23/2015	YES	
San Remo	San Leon	Paseo Westpark	NON	30 mph	34 mph	10/10/2013	YES	
Sandburg Way	Culver Dr	Michelson Dr	NON	25 mph	32 mph	10/8/2013	YES	
Scented Violet	Roosevelt	Starry Iris	NB	30 mph	34 mph	12/9/2015	YES	
	Roosevelt	Starry Iris	SB	30 mph	34 mph	12/9/2015	YES	
Scientific	Lake Forest Dr	Research Dr	NS		38 mph	12/14/2016	YES	**35 mph**
Seton Rd	Culver Dr	Michelson Dr	NON	25 mph	34 mph	11/16/2015	YES	
Shady Canyon Dr	Bonita Canyon Dr	Summit Park	EB	50 mph	51 mph	9/19/2013	YES	
	Bonita Canyon Dr	Summit Park	WB	50 mph	52 mph	9/19/2013	YES	
	Summit Park	Sunnyhill	EB	50 mph	50 mph	8/15/2013	YES	
	Summit Park	Sunnyhill	WB	50 mph	51 mph	8/15/2013	YES	
	Private Gate	Quail Hill Pkwy	NB	50 mph	48 mph	9/9/2015	YES	
	Private Gate	Quail Hill Pkwy	SB	50 mph	50 mph	9/9/2015	YES	
Sky Park Circle	< < < < Entire Loop > > > >		NON	35 mph	37 mph	9/30/2015	YES	
Southwood	Eastwood	Westwood	EB	35 mph	40 mph	11/27/2012	YES	
	Eastwood	Westwood	WB	35 mph	40 mph	11/27/2012	YES	
Spectrum Center Dr	Enterprise Dr	Entertainment Way	NS	40 mph	32 mph	12/21/2016	YES	**30 mph**
Springbrook N	Springbrook S	East Yale Loop	EB	35 mph	35 mph	9/8/2015	YES	
	Springbrook S	East Yale Loop	WB	35 mph	34 mph	9/8/2015	YES	

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CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Spring Meadow	Sand Canyon Ave	Medallion	EB	40 mph	39 mph	8/10/2015	YES	
	Sand Canyon Ave	Medallion	WB	40 mph	42 mph	8/10/2015	YES	
	Medallion	Groveland	EB	40 mph	35 mph	9/16/2015	YES	
	Medallion	Groveland	WB	40 mph	38 mph	9/16/2015	YES	
Spyglass	Knollcrest	Weathervane	EB	35 mph	39 mph	10/29/2015	YES	
	Knollcrest	Weathervane	WB	35 mph	40 mph	10/29/2015	YES	
Stanford Ct	Harvard Ave	Bridge Rd	NON	30 mph	30 mph	5/28/2014	YES	
Starcrest	Hillcrest	Turtle Rock Dr	EW	45 mph	44 mph	10/14/2016	YES	**No Change**
Stone Creek N	West Yale Loop	Stone Creek S	NON	30 mph	30 mph	9/23/2013	YES	
Stone Creek S	West Yale Loop	Stone Crk S-East curve	NON	30 mph	34 mph	11/5/2012	YES	
Summit Park	Turtle Ridge Dr	Lonetree	EW	45 mph	45 mph	10/21/2016	YES	**No Change**
Sweet Shade	Harvard Ave	Fringe Tree	EB	30 mph	31 mph	6/16/2014	YES	
	Harvard Ave	Fringe Tree	WB	30 mph	31 mph	6/16/2014	YES	
Technology Dr West	(West Terminus)	Barranca Pkwy	NON	45 mph	47 mph	4/23/2015	YES	
	Barranca Pkwy	Alton Pkwy	EB	40 mph	41 mph	11/20/2014	YES	
	Barranca Pkwy	Alton Pkwy	WB	40 mph	45 mph	9/9/2015	YES	
Technology Dr	< < < Loop: Alton-Alton > > >		NON	45 mph	50 mph	11/13/2015	YES	
Toledo Way	Alton Pkwy	Bake Pkwy	EB	50 mph	47 mph	5/19/2015	YES	
	Alton Pkwy	Bake Pkwy	WB	50 mph	48 mph	5/19/2015	YES	
Townsend	Vintage	Journey / Landmark	EW		39 mph	12/9/2016	YES	**35 mph**
Trabuco Rd	Culver Dr	Yale Ave	EW	50 mph	51 mph	10/6/2016	YES	**No Change**
	Yale Ave	Jeffrey Rd	EB	50 mph	50 mph	8/13/2015	YES	
	Yale Ave	Jeffrey Rd	WB	50 mph	55 mph	8/13/2015	YES	
	Jeffrey Rd	Sand Canyon Ave	EB	50 mph	49 mph	8/26/2014	YES	
	Jeffrey Rd	Sand Canyon Ave	WB	50 mph	52 mph	8/26/2014	YES	
Tulip	Trabuco Rd	Roosevelt	EW	35 mph	39 mph	1/20/2016	YES	
	Trabuco Rd	Roosevelt	SB	35 mph	39 mph	1/20/2016	YES	
	Roosevelt	Nightmist	NB	35 mph	38 mph	1/20/2016	YES	
	Roosevelt	Nightmist	SB	35 mph	38 mph	1/20/2016	YES	
Turtle Ridge	Newport Coast Dr	Bonita Canyon Dr	NB	40 mph	45 mph	8/26/2015	YES	
	Newport Coast Dr	Bonita Canyon Dr	SB	40 mph	40 mph	8/26/2015	YES	
Turtle Rock Dr	Campus Dr	Grossmont Ave	NB	40 mph	49 mph	8/10/2015	YES	
	Campus Dr	Grossmont Ave	SB	40 mph	44 mph	8/10/2015	YES	
	Grossmont Ave	Sierra Amigo Rd	NS	45 mph	48 mph	12/13/2016	YES	**No Change**
	Sierra Amigo Rd	Sierra Cecile Rd	NB	40 mph	46 mph	6/17/2015	YES	
	Sierra Amigo Rd	Sierra Cecile Rd	SB	40 mph	48 mph	6/17/2015	YES	
	Sierra Cecile Rd	Ridgeline Dr	NS	45 mph	47 mph	12/15/2016	YES	**No Change**
	Ridgeline Dr	Sycamore Creek E	EW	45 mph	49 mph	12/13/2016	YES	**No Change**
	Sycamore Creek E	Campus Dr	EW	45 mph	49 mph	12/12/2016	YES	**No Change**

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Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
University Dr	MacArthur Blvd	Campus Dr	EB	55 mph	52 mph	7/29/2014	YES	
	MacArthur Blvd	Campus Dr	WB	55 mph	57 mph	7/29/2014	YES	
	Campus Dr	Harvard Ave	EB	50 mph	51 mph	8/13/2015	YES	
	Campus Dr	Harvard Ave	WB	50 mph	52 mph	8/13/2015	YES	
	Harvard Ave	San Joaquin	EB	55 mph	57 mph	5/7/2015	YES	
	Harvard Ave	San Joaquin	WB	55 mph	58 mph	5/7/2015	YES	
	San Joaquin	Culver Dr	EB	55 mph	55 mph	6/15/2015	YES	
	San Joaquin	Culver Dr	WB	55 mph	54 mph	6/15/2015	YES	
	Culver Dr	Yale Ave	EB	50 mph	54 mph	8/5/2015	YES	
	Culver Dr	Yale Ave	WB	50 mph	55 mph	8/5/2015	YES	
	Yale Ave	Michelson Dr	EB	50 mph	56 mph	8/18/2015	YES	
	Yale Ave	Michelson Dr	WB	50 mph	55 mph	8/18/2015	YES	
	Michelson Dr	I-405 SB Ramp	EB	50 mph	50 mph	10/5/2015	YES	
	Michelson Dr	I-405 SB Ramp	WB	50 mph	50 mph	10/5/2015	YES	
Valley Oak	Alton Pkwy	Barranca Pkwy	NB	45 mph	44 mph	8/8/2013	YES	
	Alton Pkwy	Barranca Pkwy	SB	45 mph	42 mph	8/8/2013	YES	
	Barranca Pkwy	Irvine Center Dr	NB	45 mph	49 mph	7/1/2013	YES	
	Barranca Pkwy	Irvine Center Dr	SB	45 mph	47 mph	7/1/2013	YES	
Vintage	Regal	Townsend	NS		41 mph	12/20/2016	YES	**40 mph**
Visions	Trabuco Rd	Roosevelt	NB	35 mph	38 mph	12/10/2015	YES	
	Trabuco Rd	Roosevelt	SB	35 mph	38 mph	12/10/2015	YES	
Von Karman Ave	Campus Dr	Michelson Dr	NB	45 mph	43 mph	10/2/2013	YES	
	Campus Dr	Michelson Dr	SB	45 mph	48 mph	10/2/2013	YES	
	Michelson Dr	Main Street	NB	45 mph	48 mph	10/2/2013	YES	
	Michelson Dr	Main Street	SB	45 mph	44 mph	10/2/2013	YES	
	Main Street	Barranca Pkwy	NB	50 mph	50 mph	7/23/2013	YES	
	Main Street	Barranca Pkwy	SB	50 mph	51 mph	7/23/2013	YES	
Walnut Ave	Myford Rd	Harvard Ave	EB	40 mph	45 mph	12/4/2014	YES	
	Myford Rd	Harvard Ave	WB	40 mph	43 mph	12/4/2014	YES	
	Harvard Ave	The Mall	EB	45 mph	45 mph	6/28/2013	YES	
	Harvard Ave	The Mall	WB	45 mph	45 mph	6/28/2013	YES	
	The Mall	Culver Dr	EB	40 mph	44 mph	7/1/2013	YES	
	The Mall	Culver Dr	WB	40 mph	44 mph	7/1/2013	YES	
	Culver Dr	Yale Ave	EB	45 mph	46 mph	7/3/2013	YES	
	Culver Dr	Yale Ave	WB	45 mph	46 mph	7/3/2013	YES	
	Yale Ave	Kazan St	EB	45 mph	48 mph	5/16/2013	YES	
	Yale Ave	Kazan St	WB	45 mph	48 mph	5/16/2013	YES	
	Kazan St	Jeffrey Rd	EB	40 mph	44 mph	7/9/2013	YES	
	Kazan St	Jeffrey Rd	WB	40 mph	44 mph	7/9/2013	YES	
Warner Ave	City Limit	NB Jamboree Rd	EB	45 mph	46 mph	8/22/2013	YES	
	City Limit	NB Jamboree Rd	WB	45 mph	48 mph	8/22/2013	YES	
	NB Jamboree Rd	Harvard Ave	EB	50 mph	47 mph	5/9/2013	YES	
	NB Jamboree Rd	Harvard Ave	WB	50 mph	50 mph	5/9/2013	YES	
	Harvard Ave	Culver Dr	EB	45 mph	41 mph	9/8/2014	YES	
	Harvard Ave	Culver Dr	WB	45 mph	40 mph	9/8/2014	YES	
Westwood	Northwood	Southwood	NB	35 mph	37 mph	1/13/2012	YES	
	Northwood	Southwood	SB	35 mph	38 mph	1/13/2012	YES	
West Yale Loop	Yale Ave South	Alton Pkwy	NS	40 mph	42 mph	9/29/2016	YES	**No Change**
	Alton Pkwy	Barranca Pkwy	NS	40 mph	43 mph	9/28/2016	YES	**No Change**
	Barranca Pkwy	Yale Ave North	NS	40 mph	42 mph	9/28/2016	YES	**No Change**

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AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

Street	From	To	Direction	Existing Posted Speed	85th Percentile	Survey Date	Accident Data Considered	Recommended Posted Speed
Yale Ave	University Dr	Royce Rd	NB	35 mph	41 mph	11/16/2015	YES	
	University Dr	Royce Rd	SB	35 mph	41 mph	11/16/2015	YES	
	Royce Rd	Michelson Dr	NB	40 mph	45 mph	6/30/2015	YES	
	Royce Rd	Michelson Dr	SB	40 mph	44 mph	6/30/2015	YES	
	West Yale Loop	Irvine Center Dr	NB	40 mph	39 mph	5/18/2016	YES	**No Change**
	Irvine Center Dr	Deerfield Ave	NB	45 mph	47 mph	8/9/2014	YES	
	Irvine Center Dr	Deerfield Ave	SB	45 mph	46 mph	8/9/2014	YES	
	Deerfield Ave	Winvale Ave	NB	45 mph	48 mph	5/18/2015	YES	
	Deerfield Ave	Winvale Ave	SB	45 mph	45 mph	5/18/2015	YES	
	Winvale Ave	Walnut Ave	NB	40 mph	40 mph	5/27/2015	YES	
	Winvale Ave	Walnut Ave	SB	40 mph	42 mph	5/27/2015	YES	
	Walnut Ave	Trabuco Rd	NS	45 mph	47 mph	10/5/2016	YES	**No Change**
	Trabuco Rd	Monticello	NB	40 mph	43 mph	5/8/2013	YES	
	Trabuco Rd	Monticello	SB	40 mph	42 mph	5/8/2013	YES	
	Monticello	Irvine Blvd	NB	40 mph	42 mph	7/2/2013	YES	
	Monticello	Irvine Blvd	SB	40 mph	42 mph	7/2/2013	YES	
	Irvine Blvd	Meadowood	NB	40 mph	44 mph	5/25/2016	YES	**No Change**
	Irvine Blvd	Meadowood	SB	40 mph	42 mph	5/25/2016	YES	**No Change**

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4.11

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 AUG 30 PM 4:21

RECEIVED

AUG 30 2017

CITY OF IRVINE
CITY MANAGER'S OFFICE

Memo

To: Sean Joyce, City Manager

From: Christina Shea, Councilwoman

Date: September 5, 2017

Re: **Community Partnership Fund Grant Nominations**

In accordance with City Council Resolution No. 08-42, I am requesting the City Council approve the following community partnership grant awards:

1. **Crime Survivors - $500**
   Crime Survivors is an Irvine based organization that serves victims and survivors of crime through advocacy and the support of resources, information and empowerment.

2. **Tender Touch Ministries - $1,000**
   Tender Touch Ministries is dedicated to providing the necessary resources that prevent and end homelessness; to heighten awareness about the root causes of this major epidemic; to serve everyone with great respect, grace, and integrity.

The above organizations are qualified 501(c)(3) tax-exempt organizations. Funds will be used to support program costs.

Should the City Council approve this request, the organizations will enter into Funding Agreements with the City that specify the grants use of funds, reporting requirements and regulatory compliance.

I would like to place this item on the September 12 City Council agenda to approve these community partnership grant awards and authorize the City Manager to prepare and execute Funding Agreements.

cc: Irvine City Council
Molly McLaughlin, City Clerk

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE
2017 AUG 31 PM 5:26

RECEIVED
AUG 31 2017
CITY OF IRVINE
CITY MANAGER'S OFFICE

Memo

To: Sean Joyce, City Manager

From: Lynn Schott, Mayor Pro Tem

Date: September 5, 2017

Re: **Community Partnership Fund Grant Nomination**

In accordance with City Council Resolution No. 08-42, I am requesting the City Council approve a $1,500 community partnership grant award to the Cloud Church, Inc. in support of the Cloud School of Leadership.

The Cloud School of Leadership serves as a Community Outreach Services component of the Cloud Church in Irvine. The core initiative of the Cloud School of Leadership is to empower next generation individuals (including at-risk youth), families, and entrepreneurs through leadership training & development, business expansion, and personal skill development. The personal and skill development initiative is designed to transcend traditional job readiness and training efforts and endeavor to assist individuals in determining their optimal path to success through various personal and professional mentorship cohorts, internships, learning adventures, and customized consulting.

The above organization is a qualified 501(c)(3) tax-exempt organization.

Should the City Council approve this request, the organization will enter into a Funding Agreement with the City that specify the grants use of funds, reporting requirements and regulatory compliance.

I would like to place this item on the September 12th City Council agenda to approve this community partnership grant award and authorize the City Manager to prepare and execute Funding Agreements.

cc: Irvine City Council
Molly McLaughlin, City Clerk

5.1

REQUEST FOR CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: MINUTES

Secretary

RECOMMENDED ACTION:

Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on August 8, 2017.

MINUTES

CITY COUNCIL
REGULAR MEETING
AND
REGULAR JOINT MEETING
WITH THE CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

August 8, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

The regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency was called to order at 4:05 p.m. on August 8, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor/Chairman Wagner presiding.

ROLL CALL

Present:	4	Councilmember/Boardmember:	Melissa Fox
		Councilmember/Boardmember:	Christina Shea
		Mayor Pro Tempore/Vice Chairwoman:	Lynn Schott
		Mayor/Chairman:	Donald P. Wagner
Absent:	1	Councilmember/Boardmember:	Jeffrey Lalloway

1. CLOSED SESSION

City Attorney Melching announced the following Closed Session item:

1.1 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Deputy City Manager; Jimmee Medina, Deputy Director of Administrative Services; Brian King, Manager of Human Resources; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees

RECESS

Mayor Wagner convened the regular City Council meeting to Closed Session at 4:07 p.m.

RECONVENE TO THE CITY COUNCIL MEETING

Mayor Wagner reconvened the regular City Council meeting at 5:08 p.m. City Attorney Melching, on behalf of the City Council, announced that no reportable action was taken in Closed Session.

PLEDGE OF ALLEGIANCE

Mayor Pro Tempore Schott led the Pledge of Allegiance.

INVOCATION

Pastor Frank Winans from Woodbridge Community Church in Irvine provided the invocation.

CITY MANAGER'S REPORT

City Manager Joyce announced the upcoming retirement of Susan Emery, Director of Community Development, and Michael LeBlanc, Senior Vice President with the Irvine Company, and wished them both well in their future endeavors; and turned to Mike Hamel, Director of Public Safety/Chief of Police, who spoke about the recent National Night Out event and the department's new Mounted Unit.

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Councilmember Fox reiterated the success of the recent National Night Out event; and announced that the Association of California Cities was requesting ideas for legislation to improve businesses in cities and finding ways to prevent unnecessary regulations.

Mayor Wagner made the following announcements:

- On Saturday, August 5, the grand opening of the first phase of the Orange County Great Park Sports Park took place, which featured youth and professional athletes and ended with a concert by the Blues Brothers. The Sports Park was a result of a public-private partnership with FivePoint Communities. Amenities include six soccer fields, the Soccer Stadium, five sand volleyball courts, 25 tennis courts, and a children's play area. To learn more, call 949-724-6584 or visit *ocgp.org*.

- For the third consecutive year, the Irvine Animal Care Center is joining a nationwide effort to "Clear the Shelters". At the August 19 event, sponsored in Southern California by NBC-4 and Telemundo-52, all pet adoptions will be $20. The Irvine Animal Care Center, located at 6443 Oak Canyon Road, is open from 10 a.m. to 6 p.m. the day of the event. For information, visit *cityofirvine.org/animals.*

- The 2017 Irvine Senior Fitness Expo will take place on Friday, August 25 at the Rancho Senior Center from 9 a.m. to noon, which features exercise and fitness demonstrations, free health screenings, nutrition presentations and more. For information, call 949-724-6800 or visit *cityofirvine.org/seniors.*

- Irvine has been named the "8th Safest City in America to Raise a Child" by Safewise, a home safety website, with Irvine the only California city to make the list. The report citied bikeways, parks and open space, higher education opportunities, and FOR Families, which provides resources and short-term support to Irvine residents struggling with life's challenges. The ranking looked at cities in the United States with more than 10,000 residents, taking into account reported sex offender concentration, state graduation rates, overall school quality ranking, and FBI violent crime data. It also considered parks and recreational opportunities as well as special programs focused on providing services for kids and families.

ADDITIONS AND DELETIONS

There were no additions or deletions to the agenda.

CONVENE TO THE REGULAR JOINT MEETING

Mayor/Chairman Wagner convened to the regular Joint Meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 5:26 p.m.

2. CONSENT CALENDAR - CITY COUNCIL

ACTION: Moved by Councilmember/Boardmember Shea, seconded by Councilmember/Boardmember Fox, and unanimously carried by those members present (Councilmember/Boardmember Lalloway absent) to approve City Council Consent Calendar Item Nos. 2.1 through 2.11, and Successor Agency Consent Calendar Item Nos. 3.1 through 3.3, with the exception of City Council Consent Calendar Item No. 2.7, which was removed for separate discussion.

2.1 MINUTES

ACTION:
Approved the minutes of a regular meeting of the Irvine City Council held on July 25, 2017.

2.2 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:
Adopted RESOLUTION NO. 17-52 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

2.3 DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION PLAN AUDITS FOR THE YEAR ENDED DECEMBER 31, 2016

ACTION:
Received and filed the Defined Benefit and the Defined Contribution Pension Plan audits for the year ended December 31, 2016.

2.4 AMENDMENT FOR LEGAL ENTITY NAME CHANGE TO THE OUTSOURCED INFORMATION TECHNOLOGY SERVICES CONTRACT

ACTION:
Approved the First Amendment to the Outsourced Information Technology Services contract changing the legal entity to Enterprise Services, LLC from HP Enterprise Services, LLC. **(Contract No. 9562A)**

2.5 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:
Adopted RESOLUTION NO. 17-53 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51 **(Contract No. 6896A)**

2.6 ACCEPTANCE OF AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR REIMBURSEMENT OF TRAINING COSTS FOR FISCAL YEAR 2016 URBAN AREAS SECURITY INITIATIVE GRANT

ACTION:
1) Authorized the Director of Public Safety to accept the Agreement for Transfer or Purchase of Equipment/Supplies or for Reimbursement of Training Costs for Fiscal Year 2016 Urban Areas Security Initiative Grant. **(Contract No. 9925)**
2) Authorized the Director of Public Safety to accept equipment, technology, services or supplies purchased by the City of Anaheim and transferred to the City of Irvine to enhance countywide emergency preparedness.
3) Approved a budget adjustment request in the amount of $50,000 in grant revenues and appropriations for training costs and necessary personnel; as well as equipment, supplies or services.
4) Authorized the Director of Public Safety to submit for reimbursement up to $25,000 in training and personnel costs, and $25,000 in approved equipment, supplies or services through the Fiscal Year 2016 Urban Areas Security Initiative Grant.

2.7 ACCEPTANCE OF MARUCHAN, INCORPORATED DONATION

This item was removed for separate discussion at the request of Mayor Pro Tempore Schott, expressed her appreciation to Maruchan for its numerous donations in prior years and its recognition of the value of public safety in our community.

There was no additional discussion.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Shea, and unanimously carried by those members present (Councilmember Lalloway absent), to:

Accept a $100,000 donation from Maruchan, Incorporated.

2.8 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR ORANGE COUNTY GREAT PARK SOUTH LAWN PUMP STATION ENCLOSURE

ACTION:

1) Approved the construction plans, specifications and contract documents for the Orange County Great Park, South Lawn Pump Station Enclosure, Capital Improvement Project 381703.
2) Approved the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorized staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved budget.

2.9 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR OPERATIONS SUPPORT FACILITY ACCESSIBILITY IMPROVEMENTS

ACTION:

1) Approved the construction plans, specifications and contract documents for the Operations Support Facility Accessibility Improvements, Capital Improvement Project 361602.
2) Approved the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorized staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

2.10 NOTICE OF PENDING APPROVAL FOR TRACT MAPS IN ORCHARD HILLS, LOS OLIVOS AND PORTOLA SPRINGS

ACTION:
Received and filed.

2.11 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

1) Approved Mayor Pro Tempore Schott's requests for Community Partnership Fund Grant nominations to the Irvine Korean Evergreen Association in the amount of $1,000 **(Contract No. 9926)**, and the Irvine Barclay Theatre in the amount of $2,000 **(Contract No. 9927)**, in support of program costs; and New Outlook Center in the amount of $2,000 **(Contract No. 9902)** in support of its mission and goals.
2) Authorized the City Manager to prepare and sign the funding agreements listed in Action 1.

3. CONSENT CALENDAR - SUCCESSOR AGENCY

3.1 MINUTES

ACTION:

1) Approved the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on March 28, 2017.
2) Approved the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on July 11, 2017.

3.2 WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ACTION:
Adopted RESOLUTION NO. 17-03 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

3.3 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:
Adopted RESOLUTION NO. 17-04 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51 **(Contract No. 6896A)**

PUBLIC COMMENT - SUCCESSOR AGENCY

There were no public comments.

ADJOURNMENT - REGULAR JOINT MEETING

Moved by Mayor Pro Tempore/Vice Chairwoman Schott, seconded by Councilmember/Boardmember Shea, and unanimously carried by those members present (Councilmember/Boardmember Lalloway absent), to adjourn the regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 5:28 p.m.

_____
CHAIRMAN, SUCCESSOR AGENCY

_____ September 12, 2017
SECRETARY, SUCCESSOR AGENCY

5.2

REQUEST FOR CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

EXECUTIVE SUMMARY

On December 29, 2011, the California Supreme Court upheld Assembly Bill x1 26 (the Dissolution Act) and directed that all redevelopment agencies in the state be dissolved effective February 1, 2012. On January 10, 2012, the City Council elected to become the Successor Agency to the Irvine Redevelopment Agency. As the Successor Agency, the City will wind down the affairs of the former redevelopment agency, including the payment of invoices for services related to the dissolution.

The attached Register of Warrants and Wire Transfers contain payments totaling $12,235.64 for legal services and administrative costs. The payments will be released on Wednesday, September 13 2017.

ATTACHMENT Resolution

SUCCESSOR AGENCY RESOLUTION NO. 17-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

(SEE ATTACHED)

PASSED AND ADOPTED by the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency, at a regular meeting held on the 12th day of September 2017.

_____
CHAIR, SUCCESSOR AGENCY

ATTEST:

_____
SECRETARY, SUCCESSOR AGENCY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, Secretary to the Successor Agency, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency, held on the 12th day of September 2017.

AYES: 0 BOARDMEMBERS:
NOES: 0 BOARDMEMBERS:
ABSENT: 0 BOARDMEMBERS:

_____
SECRETARY, SUCCESSOR AGENCY

ATTACHMENT

City of Irvine as Successor Agency to the Irvine Redevelopment Agency
Register of Warrants and Wire Transfers

Warrant	Payee On Warrant	Amount	Fund	Description
00492632	CITY OF IRVINE	7,648.76	791	NON DEPARTMENTAL ADMIN COST
	Accounts Payable Subtotal	**7,648.76**		
00051236	RUTAN AND TUCKER	900.00	791	NON DEPARTMENTAL AGENCY LEGAL COSTS
		3,686.88	791	NON DEPARTMENTAL AGENCY LEGAL COSTS
		4,586.88		
	Electronic Funds Transfer Subtotal	**4,586.88**		
	Grand Total	**12,235.64**		

8/2/2017 through 8/8/2017

City of Irvine as Successor Agency to the Irvine Redevelopment Agency
Register of Warrants and Wire Transfers

Fund	Fund Description	Amount
791	REDEVELOPMENT OBLIGTN RET	12,235.64
	GRAND TOTAL	**12,235.64**

6.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: ANNUAL COMMUNITY DEVELOPMENT BLOCK GRANT AND HOME INVESTMENT PARTNERSHIPS GRANT END-OF-YEAR PROGRESS REPORT TO THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Interim Director of Community Development

City Manager

RECOMMENDED ACTION

1. Receive staff report.
2. Open the public hearing, receive public input.
3. Close the public hearing.
4. City Council comments and questions.
5. Receive and file the Consolidated Annual Performance and Evaluation Report and authorize submission to the U.S. Department of Housing and Urban Development.

EXECUTIVE SUMMARY

Each year, the City of Irvine (City) is required to provide a report to the U.S. Department of Housing and Urban Development (HUD) on its performance in meeting the objectives of the approved Consolidated Plan. The report, Consolidated Annual Performance and Evaluation Report (CAPER), documents the City's use of federal Community Development Block Grant (CDBG) and HOME Investment Partnerships (HOME) program funds for the recently completed Fiscal Year (FY 2016-17). Included in the CAPER is information about community development and housing activities that were funded through the CDBG and HOME programs.

To ensure the City meets the HUD-mandated deadline of September 30 to submit this report, the City Council is asked to review the attached draft CAPER, which will be finalized upon completion of the City's annual audit and insertion of required financial summary documents. Staff recommends that the City Council receive and file the CAPER for FY 2016-17 and authorize its submission to HUD.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

Background

CDBG is the federal program providing local governments with grants to improve the physical, economic and social conditions in their communities. HOME funds are used to expand the availability of affordable housing for low- and moderate-income residents.

All activities funded by the City through the CDBG program must meet one of the following three national objectives: 1) benefit low- and moderate-income persons as defined by federal statutes, 2) prevent or eliminate slums or blight, or 3) address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community. The intent of the HOME program is to serve low-income households by: 1) providing decent, affordable housing, 2) expanding the capacity of nonprofit housing providers, 3) strengthening the ability of state and local governments to provide affordable housing, and 4) leveraging private sector participation.

The federal statutes for the grant programs covered by the CAPER include a number of basic goals. These goals relate to HUD's major commitments and priorities, as set by Congress, covering the following three major areas:

1. Increase the supply of affordable housing, preserve existing affordable housing and provide supportive services for residents with special needs.
2. Improve the safety and livability of neighborhoods and revitalize deteriorating neighborhoods.
3. Expand economic opportunities by creating jobs for low-income residents.

HUD regulations require the CAPER to be made available to citizens for public comment and to be considered by the City Council at a public hearing. In accordance with HUD guidelines, a notice was published in the *Irvine World News* on August 10, 2017, inviting the public to comment and submit written comments on the CAPER. To date no comments have been received.

Discussion

The CAPER reports the accomplishments of CDBG and HOME programs and projects from July 1, 2016 to June 30, 2017. These activities are summarized below.

Public Service Accomplishments (CDBG)

HUD allows up to 15 percent of CDBG funds to be used for public service programs. The City Council allocated the maximum amount of $198,085 for public service programs administered during FY 2016-17. Public service programs are administered

by social service agencies that assist youth, homeless, elderly, disabled and victims of domestic violence.

Examples of the number of residents served by various public service programs during FY 2016-17 include the following:

- Provided back-to-school clothing and school supplies to 702 low-income children.
- Supported after school enrichment activities for 94 low-income children.
- Sponsored child care scholarships for 35 low-income children.
- Provided meals to 238 homebound senior citizens.
- Provided adult day health care services to 85 at-risk senior citizens.
- Provided 62 individuals with services to escape domestic violence.
- Provided rent and utility assistance to prevent homelessness for 59 households.
- Assisted 202 households transition from at-risk of homelessness to permanent housing.

Capital Accomplishments (CDBG and HOME)

For FY 2016-17, the City Council allocated over $1.3 million to capital projects consisting of $909,249 in CDBG funds and $446,896 in HOME funds. The following is a partial list of the FY 2016-17 accomplishments:

- Completed vital repairs to 13 homes occupied by low-income households.
- Completed the installation of Americans with Disabilities Act (ADA) improvements at City Hall and 16 other community facilities, including ADA-accessible restroom doors at City Hall and automated touchless faucets at 16 community and recreational facilities.
- Completed the design phase and construction contract procurement for the Lakeview Senior Center rehabilitation project. This multi-year project addresses water intrusion, insufficient drainage, and concrete improvements in the patio area. The project will be completed in spring 2018.

In addition, three FY 2015-16 CDBG capital projects were completed during FY 2016-17. These multi-year capital improvement projects included:

- Completed ADA improvements at four community facilities: Deerfield Community Center, Harvard Community Center, Heritage Park Community Center and the Irvine Fine Arts Center.
- Completed the installation of new heating, ventilation and air conditioning (HVAC) systems, and emergency backup lighting at Rancho Senior Center.

- Completed the installation of new refrigeration systems and emergency backup lighting at Lakeview Senior Center.

ALTERNATIVES CONSIDERED

The CAPER is a summary report of the activities and accomplishments of the CDBG and HOME programs for the fiscal year that concluded on June 30, 2017. This is a HUD-mandated report that must be submitted by September 30 to ensure the City's continued eligibility for these federal entitlement grant programs. Staff does not recommend any alternatives to submitting the CAPER.

FINANCIAL IMPACT

The City received $1,320,567 in CDBG funds and $494,855 in HOME funds for FY 2016-17.

REPORT PREPARED BY Charles G. Kovac, Housing and Grants Analyst

ATTACHMENT

Attachment 1: Consolidated Annual Performance and Evaluation Report

















CITY OF IRVINE
1971

Draft Consolidated Annual Performance and Evaluation Report (CAPER)

FY 2016-2017

ATTACHMENT 1



DRAFT

CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT

FISCAL YEAR 2016-2017

Prepared by:

The City of Irvine

Community Development Department

Neighborhood Services Division

1 Civic Center Plaza

Irvine, CA 92606

www.cityofirvine.org

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Appendices

The following appendices will be available as part of the final CAPER document that will be available at cityofirvine.org/cdbg in late September:

Appendix A – Public Notice..... A

Appendix B – Summary of Citizen Participation Comments..... B

Appendix C – IDIS Reports C

Appendix D – Affordable Housing Developments ..... D

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CR-05 - Goals and Outcomes

Progress the jurisdiction has made in carrying out its Strategic Plan and its Action Plan. 91.520(a)

This 2016-2017 Consolidated Annual Performance and Evaluation Report (CAPER) is the City of Irvine's report to the U.S. Department of Housing and Urban Development (HUD) describing the use of federal Community Development Block Grant (CDBG) and HOME Investment Partnerships (HOME) funds. The CAPER reports on the second Program Year of the 2015-2019 Consolidated Plan period, covering July 1, 2016 to June 30, 2017.

The City receives CDBG and HOME funds from HUD on a formula basis annually, and in turn, implements projects and awards grants and loans to nonprofit, for-profit or public organizations for projects in furtherance of the adopted 2015-2019 Consolidated Plan. The CDBG and HOME programs generally provide for a wide range of eligible activities for the benefit of low- and moderate-income Irvine residents.

For the 2016-2017 Program Year, the City received $1,320,567 CDBG funds and $494,855 HOME funds from HUD, which were combined in the Action Plan with $50,880 prior year CDBG funds and $1,526 prior year HOME funds for a total investment of $1,867,828. This investment of CDBG and HOME funds was a catalyst for positive change in the community. Together with other federal, state and local investments, HUD resources allowed the City and its partners to:

- Provide back-to-school clothing and school supplies to 702 low-income children.
- Support after school enrichment activities for 94 low-income children.
- Sponsor child care scholarships for 35 low-income children.
- Provide meals to 238 homebound senior citizens.
- Provide adult day health care services to 85 at-risk senior citizens.
- Provide 62 individuals with services to escape domestic violence.
- Provide rent and utility assistance to prevent homelessness for 59 residents.
- Help 202 residents transition from at-risk of homelessness to permanent housing.

Table 1 provides a summary of the five-year and one-year accomplishments for the period ending June 30, 2017, listed by each of the Strategic Plan Goals included in the 2015-2019 Strategic Plan of the Consolidated Plan.

Comparison of the proposed versus actual outcomes for each outcome measure submitted with the Consolidated Plan and explain, if applicable, why progress was not made toward meeting goals and objectives. 91.520(g)

Table 1 - Accomplishments – Strategic Plan and Program Year to Date

Goal	Category	2016-2017 Amount	Indicator	Unit of Measure	5-Year Strategic Plan			2016-2017 Program Year 2		
					Expected	Actual	Percent Complete	Expected	Actual	Percent Complete
Affordable Housing Preservation	Affordable Housing	No Activities	Rental Units Rehabilitated	Household Housing Unit	8	0	0.00%	0	0	0.00%
		CDBG: $67,699 HOME: $446,896	Homeowner Housing Rehabilitated	Household Housing Unit	65	28	43.08%	16	13	81.25%
Affordable Rental Housing Development	Affordable Housing	CDBG: $0 HOME: $0	Rental Units Constructed	Household Housing Unit	225	54	24.00%	0	0	0.00%
Fair Housing Services	Affordable Housing	CDBG: $17,119	Public Service Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	1,750	478	27.31%	335	238	71.04%
Homelessness Prevention Services	Homeless	CDBG: $50,593	Public Service Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	1,000	494	49.40%	256	264	103.13%
Senior Services	Non-Housing Community Development	CDBG: $39,748	Public Service Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	1,200	599	49.92%	260	323	124.23%
Special Needs Services	Non-Homeless Special Needs	CDBG: $23,319	Public Service Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	500	152	30.40%	70	81	115.71%
Youth Services	Public Services	CDBG: $67,306	Public Service Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	4,500	1,735	38.56%	535	831	155.33%

Goal	Category	2016-2017 Amount	Indicator	Unit of Measure	5-Year Strategic Plan			2016-2017 Program Year 2		
					Expected	Actual	Percent Complete	Expected	Actual	Percent Complete
City of Irvine Public Facilities Improvements	Non-Housing Community Development	CDBG: $841,550	Public Facility or Infrastructure Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	15,270	15,438	101.10	14,870	15,438	103.82%
Other Public Facilities Improvements	Non-Housing Community Development	No 2016-2017 Activities	Public Facility or Infrastructure Activities other than Low/Moderate Income Housing Benefit	Persons Assisted	100	3,694	>100.00%	0	0	0.00%

Assess how the jurisdiction's use of funds, particularly CDBG, addresses the priorities and specific objectives identified in the Action Plan, giving special attention to the highest priority activities identified.

As shown in Table 1, the City and its housing and community development partners made significant progress toward achieving the 2016-2017 Program Year goals established in the Action Plan. Each of the CDBG and HOME funded activities addressed specific high priority objectives identified in the 2015-2019 Consolidated Plan.

The City allocated the majority of CDBG funds to public facilities improvements to benefit low- and moderate-income residents including senior citizens and persons with disabilities. These activities address a high priority need in the 2015-2019 Consolidated Plan to improve public facilities and infrastructure. The City completed Community Facilities ADA Improvements at 21 public facilities, completed the installation of new heating, ventilation and air conditioning (HVAC) systems and emergency backup lighting at Rancho Senior Center, and completed the installation of new refrigeration systems and emergency backup lighting at Lakeview Senior Center. In addition, the Public Works Department completed the design phase and construction contract procurement for a major project to address water intrusion, insufficient drainage and concrete improvements in the patio area at Lakeview Senior Center. This multi-year project is expected to be complete in spring 2018.

Each of the activities that were underway during the 2016-2017 Program Year are listed in Figure 1, including the amount of CDBG or HOME funds allocated to the activity and the amount spent as of June 30, 2017. Figure 2 provides the numeric accomplishment goal and the amount accomplished as of June 30, 2017.

Figure 1 – Use of CDBG and HOME Funds

Strategic Plan Goal / Activity	Source	Allocation	Spent through 6/30/17	Percent Spent
1. Affordable Housing Preservation				
Residential Rehabilitation Program	CDBG	$67,699	$45,073.52	66.58%
	HOME	$372,667	$243,512.50	65.34%
Community Housing Development Organization (Reserve)	HOME	$74,229	$0.00	0.00%
	Subtotal	**$514,595**	**$288,586.02**	**56.08%**
2. Fair Housing Services				
Fair Housing Foundation - Fair Housing Services	CDBG	$17,119	$17,119.00	100.00%
	Subtotal	**$17,119**	**$17,119.00**	**100.00%**
3. Youth Services				
Assistance League of Irvine - Operation School Bell	CDBG	$21,408	$21,408.00	100.00%
Irvine Children's Fund - Before and After School Child Care	CDBG	$33,446	$33,446.00	100.00%
Irvine Public Schools Foundation - After School Enrichment	CDBG	$12,452	$12,452.00	100.00%
	Subtotal	**$67,306**	**$67,306.00**	**100.00%**
4. Senior Services				
Irvine Adult Day Health Services - Skilled Nursing Care	CDBG	$19,397	$19,397.00	100.00%
National Charity League - Meals on Wheels	CDBG	$20,000	$20,000.00	100.00%
	Subtotal	**$39,397**	**$39,397.00**	**100.00%**
5. Special Needs Services				
Human Options - Domestic Violence Services	CDBG	$13,493	$11,405.49	84.53%
AIDS Service Foundation - HIV/AIDS Case Management and Support Services	CDBG	$10,177	$6,725.09	66.08%
	Subtotal	**$23,670**	**$18,130.58**	**76.60%**
6. Homelessness Prevention Services				
Families Forward - Transitional Housing Program	CDBG	$21,951	$21,951.00	100.00%
HOMES - Lakeview Aisle Transitional Housing for Emancipated Foster Youth	CDBG	$12,132	$12,132.00	100.00%
South County Outreach - Homelessness Prevention	CDBG	$16,510	$16,510.00	100.00%
	Subtotal	**$50,593**	**$50,593.00**	**100.00%**
7. City of Irvine Public Facilities Improvements				
Lakeview Senior Center Drainage / Concrete	CDBG	$767,850	$23,184.35	3.02%
Community Facilities ADA Improvements	CDBG	$73,700	$45,713.22	62.03%
Community Facilities ADA Improvements (2015-2016)	CDBG	$716,477	$549,711.68	76.72%
Lakeview Senior Center HVAC (2015-2016)	CDBG	$47,201	$33,591.00	71.17%
Rancho Senior Center Improvements (2015-2016)	CDBG	$478,565	472,968.60	98.83%
	Subtotal	**$2,083,793**	**$1,125,168.85**	**54.00%**
8. Program Administration				
CDBG Program Administration	CDBG	$264,113	$264,113.00	100.00%
HOME Program Administration	HOME	$49,485	$49,485.00	100.00%
	Subtotal	**$313,598**	**$313,598.00**	**100.00%**
Total for all Goals:		**$3,110,071**	**$1,919,898.45**	**61.73%**

* *All activities are from the 2016-2017 Action Plan unless otherwise noted.*

Figure 2 – Program Year Accomplishments by Strategic Plan Goal

Strategic Plan Goal / Activity	Unit of Measure	Expected	Actual	Percent Accomplished
1. Affordable Housing Preservation				
Residential Rehabilitation Program	Household Unit	16	13	81.25%
2. Fair Housing Services				
Fair Housing Foundation - Fair Housing Services	People	335	238	71.04%
3. Youth Services				
Assistance League of Irvine - Operation School Bell	People	400	702	175.50%
Irvine Children's Fund - Before and After School Child Care	People	35	35	100.00%
Irvine Public Schools Foundation - After School Enrichment	People	100	94	94.00%
4. Senior Services				
Irvine Adult Day Health Services - Skilled Nursing Care Program	People	85	85	100.00%
National Charity League - Meals on Wheels	People	175	238	136.00%
5. Special Needs Services				
Human Options - Domestic Violence Services	People	50	62	124.00%
AIDS Service Foundation - HIV/AIDS Case Management and Support Services	People	20	19	95.00%
6. Homelessness Prevention Services				
Families Forward - Transitional Housing Program	People	200	202	101.50%
HOMES - Lakeview Aisle Transitional Housing for Emancipated Foster Youth	People	6	3	50.00%
South County Outreach - Homelessness Prevention	People	50	59	118.00%
7. City of Irvine Public Facilities Improvements				
Lakeview Senior Center Drainage / Concrete	People	600	0	0.00%
Community Facilities ADA Improvements^	People	14,720	14,178	96.32%
Community Facilities ADA Improvements (2015-2016)*^				
Lakeview Senior Center HVAC (2015-2016)*	People	600	600	100.00%
Rancho Senior Center Improvements (2015-2016)*	People	400	400	100.00%
8. Program Administration				
CDBG Program Administration	NA	-	-	-
HOME Program Administration	NA	-	-	-

* *All activities listed are from the 2016-2017 Action Plan unless otherwise noted with an asterisk.*

^ *HUD supplies a special dataset from the U.S. Census Bureau delineating the number of severely disabled adults in the City of Irvine by race. The two Community Facilities ADA activities completed in the Spring of 2017 primarily benefits this population of 14,178 residents.*

CR-10 - Racial and ethnic composition of families assisted

Describe the families assisted (including the racial and ethnic status of families assisted). 91.520(a)

Table 2 – Table of assistance to racial and ethnic populations by source of funds*

Race / Ethnicity	CDBG	HOME
White	10,523	7
Black or African American	526	0
Asian	4,435	0
American Indian or American Native	87	0
Native Hawaiian or Other Pacific Islander	98	0
Other	1,512	0
Total	**17,181**	**7**
Hispanic	1,570	1
Not Hispanic	15,611	6

* Note: The data in this table is supplied by HUD's database. The figures in this table represent the sum of the reported number of people, families, households or housing units reported during the Program Year, without regard to the number of people in each family, household or housing unit.

Narrative

Table 2 provides an aggregate of race and ethnicity data for the combined number of people, families, households or housing units reported as complete during the Program Year based on accomplishment data from all CDBG and HOME activities reported in HUD's Integrated Disbursement and Information System (IDIS).

CR-15 - Resources and Investments 91.520(a)

Identify the resources made available

Table 3 - Resources Made Available

Source of Funds	Resources Made Available in the 2016-2017 Action Plan	Amount Expended During Program Year
CDBG	$1,371,447	$570,629.67
HOME	$496,381	$292,997.50

*Note: This table generated by HUD's database provides figures for activities funded in the 2016-2017 Action Plan only. The figures do not include prior year activities that were completed during the 2016-2017 Program Year.

Narrative

The federal, state, local and private resources allocated in the 2016-2017 Action Plan for the implementation of projects are identified in Table 3. The CDBG resources include $1,320,567 of CDBG formula grant funds and $50,880 of unexpended CDBG funds from prior years for a total CDBG investment of $1,371,447. The HOME resources include $494,855 of HOME grant funds and $1,526 of unexpended HOME funds from prior years for a total HOME investment of $496,381. A grand total of $1,867,828 of CDBG and HOME funds were allocated to projects in the 2016-2017 Action Plan.

Identify the geographic distribution and location of investments

Table 4 – Identify the geographic distribution and location of investments

Target Area	Planned Percentage of Allocation	Actual Percentage of Allocation	Narrative Description
Citywide Area	100%	100%	All projects were Citywide projects.

*Note: The data in this table is generated by HUD's database. The City did not designate specific CDBG or HOME target areas in the 2015-2019 Consolidated Plan; therefore, 100 percent of all CDBG and HOME funds are represented under the "Citywide Area" designation.

Narrative

For the 2016-2017 Program Year, the City allocated 100 percent of its non-administrative CDBG and HOME investments for Program Year 2016-2017 to projects and activities that benefit low- and moderate-income persons throughout the City of Irvine.

Leveraging

Explain how federal funds leveraged additional resources (private, state, and local funds), including a description of how matching requirements were satisfied, as well as how any publicly owned land or property located within the jurisdiction that were used to address the needs identified in the Action Plan.

To address housing and community development needs in Irvine, CDBG and HOME entitlement grants are used to leverage a variety of funding resources in order to maximize the effectiveness of available funds. The CDBG Public Service activities leveraged over $4 million of private, state and other federal funds.

HUD requires HOME Participating Jurisdictions (PJs) to match 25 percent of their HOME annual allocation. For the 2016-2017 Program Year, the City of Irvine satisfied its $77,724.00 match liability using excess match from prior fiscal years. The balance of HOME match carried forward to satisfy matching obligations during the 2017-2018 Program Year is $26,286,375.23.

Table 5 – Fiscal Year Summary - HOME Match Report

Fiscal Year Summary – HOME Match	
1. Excess match from prior Federal Fiscal Year	$26,443,210.23
2. Match contributed during current Federal Fiscal Year	$0
3 .Total match available for current Federal Fiscal Year (Line 1 plus Line 2)	$26,443,210.23
4. Match liability for current Federal Fiscal Year	$156,835.00
5. Excess match carried over to next Federal Fiscal Year (Line 3 minus Line 4)	$26,286,375.23

Table 6 – Match Contribution for the Federal Fiscal Year

Match Contribution for the Federal Fiscal Year								
Project No. or Other ID	**Date of Contrib.**	**Cash (non-Federal sources)**	**Foregone Taxes, Fees, Charges**	**Appraised Land/Real Property**	**Required Infrastruc-ture**	**Site Prep., Const. Materials, Donated labor**	**Bond Financing**	**Total Match**
-	-	$0	$0	$0	$0	$0	$0	$0

Table 7 – HOME Program Income

HOME Program Income – Enter the program amounts for the reporting period				
Balance on hand at beginning of reporting period	**Amount received during reporting period**	**Total amount expended during reporting period**	**Amount expended for TBRA**	**Balance on hand at end of reporting period**
$7,512.79	$203,550.22	$34,553.71	$0	$176,509.00

HOME MBE/WBE report

Minority Business Enterprises and Women Business Enterprises – Indicate the number and dollar value of contracts for HOME projects completed during the reporting period

Table 8 – Minority Business and Women Business Enterprises

	Total	Minority Business Enterprises				White Non-Hispanic
		Alaskan Native or American Indian	Asian or Pacific Islander	Black Non-Hispanic	Hispanic	
Contracts						
Number	7		1			6
Dollar Amount	$150,000		$25,000			$150,000
Sub-Contracts						
Number	0	0	0	0	0	0
Dollar Amount	$0	$0	$0	$0	$0	$0

	Total	Women Business Enterprises	Male
Contracts			
Number	7	0	7
Dollar Amount	$150,000	$0	$150,000
Sub-Contracts			
Number	0	0	0
Dollar Amount	$0	$0	$0

Minority Owners of Rental Property – Indicate the number of HOME assisted rental property owners and the total amount of HOME funds in these rental properties assisted

Table 9 – Minority Owners of Rental Property

	Total	Minority Property Owners				White Non-Hispanic
		Alaskan Native or American Indian	Asian or Pacific Islander	Black Non-Hispanic	Hispanic	
Number	0	0	0	0	0	0
Dollar Amount	$0	$0	$0	$0	$0	$0

Relocation and Real Property Acquisition – Indicate the number of persons displaced, the cost of relocation payments, the number of parcels acquired and the cost of acquisition

Table 10 – Relocation and Real Property Acquisition

Parcels Acquired	0	$0
Businesses Displaced	0	$0
Nonprofit Organizations Displaced	0	$0
Households Temporarily Relocated, not Displaced	0	$0

Households Displaced	Total	Minority Property Enterprises				White Non-Hispanic
		Alaskan Native or American Indian	Asian or Pacific Islander	Black Non-Hispanic	Hispanic	
Number	0	0	0	0	0	0
Cost	$0	$0	$0	$0	$0	$0

CR-20 - Affordable Housing 91.520(b)

Evaluation of the jurisdiction's progress in providing affordable housing, including the number and types of families served, the number of extremely low-income, low-income, moderate-income and middle-income persons served.

Table 11 – Number of Households

	One-Year Goal	Actual
Number of homeless households to be provided affordable housing units	0	0
Number of non-homeless households to be provided affordable housing units	16	13
Number of special-needs households to be provided affordable housing units	0	0
Total	**16**	**13**

Table 12 – Number of Households Supported

	One-Year Goal	Actual
Number of households supported through rental assistance	0	0
Number of households supported through the production of new units	0	0
Number of households supported through the rehab of existing units	16	13
Number of households supported through the acquisition of existing units	0	0
Total	**16**	**13**

Discuss the difference between goals and outcomes and problems encountered in meeting these goals.

The 2016-2017 Action Plan allocated $67,699 of CDBG funds and $446,896 of HOME funds for the preservation of 16 owner-occupied single family dwellings as part of the Residential Rehabilitation Program. The Residential Rehabilitation Program served 13 low-income households during the year and made an additional five loans for rehabilitation projects that will be reported as part of the next CAPER. The $446,896 of HOME funds includes $74,229 that was reserved in accordance with HUD requirements for a Community Housing Development Organization (CHDO) project. No qualified CHDO project applications were submitted in response to the 2016-2017 Notice of Funding Availability.

Discuss how these outcomes will impact future annual action plans.

The 2015-2019 Consolidated Plan - Strategic Plan identified a high priority need to preserve the supply of affordable housing. During the 2016-2017 Program Year, the City of Irvine invested HOME funds in the rehabilitation of 13 owner-occupied single family dwellings. In future annual action plans, the City anticipates continuing to invest in affordable housing preservation and also investing in projects that will create new affordable housing opportunities for low-income residents.

Include the number of extremely low-income, low-income, and moderate-income families or households served by each activity where information on income by family size is required to determine the eligibility of the activity.

Table 13 – Number of Families or Households Served

Number Served	CDBG Actual	HOME Actual
Extremely Low-Income	1	1
Low-Income	3	2
Moderate-Income	2	4
Total	6	7

Narrative Information

The 2015-2019 Consolidated Plan - Strategic Plan identified high priority affordable housing needs including developing new affordable rental housing units and preserving the supply of affordable rental and owner-occupied housing. To preserve housing that is already affordable to low-income homeowners, the City of Irvine Residential Rehabilitation Program rehabilitated 13 owner-occupied units. To address what HUD defines as “worst case housing need” – low-income residents who pay more than 50 percent of their income for housing costs—the City funded the Parc Derian Apartments project as part of the 2015-2016 Action Plan. The Parc Derian project will be completed during the upcoming 2017-2018 Program Year.

CR-25 - Homeless and Other Special Needs 91.220(d, e); 91.320(d, e); 91.520(c)

Evaluate the jurisdiction's progress in meeting its specific objectives for reducing and ending homelessness through:

Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs

To reach out to unsheltered homeless persons and assess their individual needs for the purpose of connecting them with available emergency shelter and transitional housing resources, the City of Irvine, through its Neighborhood Services Division (formerly the Housing Division), Public Safety Department and Community Services Department provided information and referrals — primarily to 2-1-1 Orange County. Additionally, to reduce and end homelessness, the City of Irvine provided CDBG public service funds for the following activities:

- Families Forward: Transitional Housing Program (202 residents served)
- HOMES / Jamboree: Lakeview Aisle Transitional Housing for Emancipated Foster Youth Program (three residents served)
- South County Outreach: Homelessness Prevention Program (59 residents served)

Addressing the emergency shelter and transitional housing needs of homeless persons

To address the emergency shelter and transitional housing needs of homeless persons, the City of Irvine supports the Families Forward Housing Program that provides transitional housing, counseling and case management to families at risk of homelessness. During the Program Year, Families Forward served 202 unduplicated persons. The HOMES / Jamboree Lakeview Aisle Transitional Housing for Emancipated Foster Youth program provided three people with stable housing and support services as they transitioned from the foster care system into permanent housing. The South County Outreach Homelessness Prevention Program provided rental and utility assistance to 59 residents to prevent homelessness.

Additionally, the City supports Human Options, an organization providing emergency shelter and support services to victims of domestic violence. The Human Options Family Healing Center is an on-site short-term transitional housing program with five self-contained apartments for abused women and their children who have successfully completed a 30-45 day emergency shelter program and are eligible to participate in the Family Healing Center program for up to three months.

Helping low-income individuals and families avoid becoming homeless, especially extremely low-income individuals and families and those who are: likely to become homeless after being discharged from publicly funded institutions and systems of care (such as health care facilities, mental health facilities, foster care and other youth facilities, and corrections programs and institutions); and, receiving assistance from public or private agencies that address housing, health, social services, employment, education, or youth needs

To help low-income individuals and families avoid becoming homeless, the City provides CDBG public service funds to the South County Outreach Homelessness Prevention program that provides emergency rental assistance to help residents prevent eviction from their homes in the event of unforeseen economic circumstances. The program also provides emergency utility assistance to prevent service disconnection. The program served 68 residents during the Program Year. Other South County Outreach services that support family well-being include a community food pantry, case management in the development of a self-sufficiency action plan and a computer learning lab.

Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again

The 2015-2019 Strategic Plan provides for the use of CDBG funds to support activities implemented by local nonprofit organizations that provide services to help prevent and eliminate homelessness, including families at risk of homelessness. To address the needs of homeless families, families with children, veterans and their families, the City supports the Families Forward Housing Program, which provides transitional housing, counseling and case management to families at risk of homelessness. Each year, Families Forward serves over 200 unduplicated individuals through its transitional housing program. When paired with financial counseling, career coaching and other available case management services, Families Forward makes certain that families are ready to succeed in their transition to permanent housing.

To address the needs of at-risk emancipated foster youth (18-21 years of age) as they make the transition to permanent housing and independent living, the City supports the Transitional Housing for Emancipated Foster Youth program at Lakeview Aisle, which provides a safe, secure and stable living environment where residents are required to pursue an academic or certificate program and also maintain part-time employment.

CR-30 - Public Housing 91.220(h); 91.320(j)

Actions taken to address the needs of public housing

There are no public housing developments in Irvine. All public housing programs consist of Housing Choice and Project-Based Housing Choice Vouchers administered by the Orange County Housing Authority (OCHA). Through participation in the County of Orange Cities Advisory Committee, Irvine continued to support OCHA in effective administration of its limited affordable housing resources. The City also continued to work with OCHA to include the residents with Section 8 Housing Choice Vouchers in the federally-funded programs administered by the City.

As of April, 2017, OCHA administered a total of 9,240 housing vouchers throughout Orange County. Of these, 843 were issued to Irvine residents. Families received 237 housing vouchers, 206 housing vouchers were issued to Irvine's disabled population, and 400 housing vouchers were issued to Irvine's elderly population. OCHA monitors all units to ensure they are in adequate condition, meeting the Section 8 Housing Quality Standards (HQS). To address the needs of public housing residents, the OCHA Board of Directors and staff are implementing the goals listed below.

- Apply for additional housing assistance funding and programs that may become available.
- Explore the use of Project-Based Housing Choice Vouchers or other housing funds to promote the construction or acquisition activities that will result in additional units or developments that will serve special needs populations.
- Ensure consistent quality of assisted housing services by maintaining high performer status in Section Eight Management Assessment Program (SEMAP) scores.
- Promote Family Self-Sufficiency incentives and homeownership opportunities for Housing Choice Voucher participants in partnership with local programs and related service providers.
- Expand assisted housing choices by conducting outreach efforts to increase the number of property owners and their participation in housing assistance programs.
- Identify and utilize technology to enhance operational effectiveness and efficiency in delivery of housing assistance services.

Actions taken to encourage public housing residents to become more involved in management and participate in homeownership

OCHA actively supports resident councils and seeks input from Public Housing Agency residents on the management and implementation of OCHA policies and procedures. Housing prices in Orange County are so high that homeownership opportunities are limited for OCHA residents. On a limited basis, OCHA has partnered with Habitat for Humanity to provide two affordable

homeownership units. During the Program Year, OCHA also managed a Housing Choice Voucher Homeownership Program that it markets to all OCHA program tenants.

Actions taken to provide assistance to troubled PHAs

N/A, OCHA is designated as a High Performing Public Housing Agency.

CR-35 - Other Actions 91.220(j)-(k); 91.320(i)-(j)

Actions taken to remove or ameliorate the negative effects of public policies that serve as barriers to affordable housing such as land use controls, tax policies affecting land, zoning ordinances, building codes, fees and charges, growth limitations, and policies affecting the return on residential investment. 91.220 (j); 91.320 (i)

The two primary barriers to affordable housing identified in the 2015-2019 Consolidated Plan include housing affordability and the lack of monetary resources for affordable housing. As discussed in the Consolidated Plan's Strategic Plan section, a significant portion of the monetary resources that were used for affordable housing in the past included tax increment financing through the former Redevelopment Agency that was eliminated as a result of changes in state policy and law.

To address housing affordability and the lack of monetary resources for affordable housing, the Strategic Plan calls for the investment of a significant portion of CDBG and HOME funds for the development of 225 new affordable rental housing units during the five-year period of the Consolidated Plan and the rehabilitation and preservation of 73 existing affordable housing units over the next five years.

During the 2016-2017 Program Year, the City provided owner-occupied rehabilitation loans to 13 very-low- and low-income households to maintain their homes in decent, safe and sanitary condition. In the 2015-2016 Action Plan, the City invested $603,848 of HOME funds for the Parc Derian Apartments development to improve housing affordability for low-income households. The Parc Derian Apartments are expected to be completed during the 2017-2018 Program Year.

In future Program Years, the City will continue to leverage its CDBG and HOME funds to attract private and other available public resources, including land conveyed to the City for the purpose of affordable housing, to facilitate affordable housing development. This strategy will increase the supply of affordable housing and preserve existing affordable housing in Irvine.

Actions taken to address obstacles to meeting underserved needs. 91.220(k); 91.320(j)

The primary obstacles to meeting the underserved needs of low- and moderate-income households include lack of funding from federal, state and other local sources, and the high cost of housing that is not affordable to low-income people. To address these obstacles, the City invested CDBG and HOME funds in projects that provided:

- Loans to 13 low- and moderate-income homeowners for home improvements;
- Public facilities improvements at 18 City of Irvine public facilities (including two senior centers) to benefit individuals presumed under HUD regulations to be low- and moderate-income; and
- Projects that prevented homelessness.

To address underserved needs, 100 percent of the City's 2016-2017 expenditures benefitted low- and moderate-income households or those presumed under HUD regulations to be low- and moderate-income.

Actions taken to reduce lead-based paint hazards. 91.220(k); 91.320(j)

The Residential Lead Based Paint Hazard Reduction Act of 1992 (Title X) emphasizes prevention of childhood lead poisoning through housing-based approaches. To reduce lead-based paint hazards, the rehabilitation of housing units built prior to January 1, 1978 included a lead-based paint test and risk assessment report. Where lead-based paint is identified, the City ensured that developers and contractors incorporated safe work practices or abated the lead-based paint as part of the scope of work to effectively reduce lead-based paint hazards to children in accordance with federal regulations.

Actions taken to reduce the number of poverty-level families. 91.220(k); 91.320(j)

During the Program Year, the City supported the following strategies and actions to reduce the number of poverty-level families:

- Invested HOME funds in activities to expand the supply of housing that is affordable to low- and moderate-income households;
- Partnered with housing developers to implement the City's Inclusionary Zoning Ordinance (which makes affordable housing an integral part of every newly constructed residential project in the City);
- Supported the activities of the Irvine Community Land Trust, a nonprofit organization dedicated to creating and maintaining permanently affordable housing in Irvine;
- Supported a continuum of housing and public service programs to prevent and eliminate homelessness;
- Supported housing preservation programs that ensure low-income households have a safe, decent and appropriate place to live; and
- Supported public services through various nonprofits funded by CDBG that serve the community's youth, seniors, families, veterans and those with special needs.

In addition to these efforts, mainstream state and federal resources also contributed to reducing the number of individuals and families in poverty. Federal programs such as the Earned Income Tax Credit and Head Start provided a pathway out of poverty for families who were ready to pursue employment and educational opportunities. Poverty-level families also had access to CalWORKS, CalFresh (formerly food stamps) and Medi-Cal. Together these programs provided individuals and families with employment assistance, subsidy for food, medical care, childcare and cash payments to meet basic needs such as housing, nutrition, and transportation.

Actions taken to develop institutional structure. 91.220(k); 91.320(j)

The institutional delivery system in Irvine is high-functioning and collaborative — particularly the relationship between local government and the nonprofit sector comprised of a network of capable community-based organizations that are delivering a full range of services to residents.

Affordable housing development and preservation activities were carried out by the Neighborhood Services Division of the Community Development Department in partnership with housing developers and contractors. Public service activities were carried out by nonprofit organizations and City departments to achieve the Strategic Plan goals. The Neighborhood Services Division and the Public Works Department actively worked during the Program Year to implement five public facility improvement projects funded through the 2015-2016 and 2016-2017 Action Plans.

One of the key ways the City is developing and expanding institutional structure to meet underserved needs is by funding a wide variety of services targeted to Irvine residents including youth, seniors, individuals or families at risk of homelessness, veterans and other special needs populations with CDBG public service grants.

Actions taken to enhance coordination between public and private housing and social service agencies. 91.220(k); 91.320(j)

To enhance coordination between public and private housing and social service agencies, the City continued consulting with and inviting a wide variety of agencies and organizations involved in the delivery of housing and supportive services to low- and moderate-income residents to participate in the CDBG and HOME program through the annual Notice of Funding Availability process.

Identify actions taken to overcome the effects of any impediments identified in the jurisdictions analysis of impediments to fair housing choice. 91.520(a)

The 2015 Analysis of Impediments to Fair Housing Choice (2015 AI) adopted by the Irvine City Council in April, 2015, concluded there were no impediments to fair housing choice in Irvine. To ensure this condition continues into the future, the 2015-2019 Fair Housing Plan provided recommendations designed to continue addressing the regional impediments to fair housing choice that were identified in the Orange County Regional Analysis of Impediments to Fair Housing Choice in 2011 (2011 AI) – a report that also did not identify any impediments specific to the City of Irvine.

For the 2016-2017 Program Year, the City contracted with the Fair Housing Foundation to provide fair housing education and general housing services to Irvine residents in an effort to prevent incidences of housing discrimination. Implementation of the 2015-2019 Fair Housing Plan recommendations during the Program Year was principally undertaken by the Fair Housing Foundation, with the participation of the City of Irvine Neighborhood Services Division.

Regional Impediment 1: Housing Discrimination

Regionally, there were a number of complaints filed annually by Orange County residents alleging discriminatory practices in rental and ownership housing. The leading bias identified in the 2011 AI was physical or mental disability (35 percent of all complaints). This trend continued in 2015 according to data supplied by the Fair Housing Foundation and reported in the 2015 AI.

> **Actions Taken:** Fair Housing Foundation provided services that addressed general housing and fair housing discrimination to 238 residents and provided fair housing education services throughout Irvine. Outreach included seven informational booths at community events; seven overview presentations to community based organizations, resident associations and government agencies; and seven workshops tailored to specific audiences, including three Certificate Management Trainings, two Landlord Workshops and two Tenant Workshops.

Regional Impediment 2: Discriminatory Advertising

Regionally, there were incidents of discriminatory advertising that have the potential to discourage a certain type of renter or buyer from pursuing a housing opportunity. Advertisements indicating a preference for a certain type of tenant or buyer such as “no pets” “no children” “No Section 8” or “Ideal for single adult” have the effect of housing discrimination.

> **Actions Taken:** The Fair Housing Foundation provided fair housing education services in Irvine, including three Certificate Management training classes for property owners, managers, management companies, and real estate professionals.

Regional Impediment 3: Denial of Reasonable Modifications/Reasonable Accommodations

It is unlawful to refuse to make reasonable accommodations for disabled persons. Section 804 (3) of the 1968 Fair Housing Act states that discrimination includes: (A) a refusal to permit, at the expense of the handicapped person, reasonable modifications of existing premises occupied or to be occupied by such person if such modifications may be necessary to afford such person full enjoyment of the premises, except that, in the case of a rental, the landlord may where it is reasonable to do so condition permission for a modification on the renter agreeing to restore the interior of the premises to the condition that existed before the modification, reasonable wear and tear excepted; and (B) a refusal to make reasonable accommodations in rules, policies, practices, or services, when such accommodations may be necessary to afford such person equal opportunity to use and enjoy a dwelling. The 2011 AI indicated that denial of reasonable modifications or accommodations was an issue in the Orange County region and fair housing data supplied by the Fair Housing Foundation for the 2015 AI indicated this continues to be a challenge for residents with disabilities.

Actions Taken: The Fair Housing Foundation continued providing fair housing education workshops such as the "Accommodation and Modification 101 Workshop" to housing providers and continued providing access to Certificate Management classes for rental property owners and managers from Irvine.

Regional Impediment 4: Hate Crimes

Hate crimes committed at a residence are an impediment to fair housing choice because they impact the lives of 20-30 households per year in Orange County. According to the 2015 AI, the number of hate crime incidents occurring within the Irvine city limits has diminished from seven in 2011 to one in 2013 (Source: Federal Bureau of Investigation (FBI) hate crimes data collected from local law enforcement as part of Uniform Crime Reporting statistics). The Irvine Police Department reported to the FBI 11 hate crimes from 2011-2013. The most prevalent bias motivations reported were religion and ethnicity, accounting for eight out of 11 cases or 72 percent of all hate crimes.

Actions Taken: The Neighborhood Services Division continued to monitor FBI data to determine if there are actions that may be taken by the City or the Fair Housing Foundation to address potential discrimination linked to the bias motivations of hate crimes. According to the most recent available data published since the adoption of the 2015 AI, three hate crimes were reported in Irvine for calendar year 2015, including one incident motivated by race, one incident motivated by religion and one incident motivated by sexual orientation. Four hate crimes were reported in Irvine for calendar year 2014, including three incidents motivated by race and one incident motivated by religion. Data for calendar year 2016 was not available as of this writing in August, 2017. The City will continue to contract with the Fair Housing Foundation to educate residents and housing providers concerning discrimination on the basis of ethnicity, race or religion.

Regional Impediment 5: Unfair Lending

The 2011 AI supplied Countywide data suggesting that loan denial rates experienced by Hispanic and Black/African American applicants create an impediment to fair housing choice as they have loans denied at rates 1.5 to 2.0 times greater than White applicants throughout the region. The 2011 AI did not provide Home Mortgage Disclosure Act (HMDA) data specific to the City of Irvine. In the 2015 AI, the City examined 2012 HMDA data (the most recent available as of that writing). The 2015 AI did not identify any patterns of unfair lending in the City of Irvine.

Actions Taken: The Neighborhood Services Division reviewed 2013 and 2014 HMDA data as recommended in the Fair Housing Plan contained within the 2015 AI. There were no discernable patterns of unfair lending in the City of Irvine based on this evaluation.

CR-40 - Monitoring 91.220 and 91.230

Describe the standards and procedures used to monitor activities carried out in furtherance of the plan and used to ensure long-term compliance with requirements of the programs involved, including minority business outreach and the comprehensive planning requirements

To ensure that CDBG and HOME funds are used efficiently and in compliance with applicable regulations, the City provided technical assistance to all subrecipients at the beginning of the Program Year and monitored all subrecipients throughout the Program Year.

Technical Assistance

To enhance compliance with federal program regulations, the City provided a Notice of Funding Availability (NOFA) workshop to review the Consolidated Plan goals, program requirements and available resources with potential applicants. Subsequent to the approval of the Annual Action Plan, a mandatory subrecipient workshop was held to review program regulations in detail, to provide useful forms and resources for documenting compliance and to review the City's compliance procedures and requirements. Additionally, individualized technical assistance was provided on an as-needed basis during the Program Year.

Activity Monitoring

All activities were monitored, beginning with a detailed review upon receipt of an application to determine eligibility, conformance with a National Objective and conformance with an Action Plan goal. This review also examined the proposed use of funds, eligibility of the service area, the intended beneficiaries, and likelihood of compliance with other federal requirements such as the National Environmental Policy Act, the System for Award Management (SAM) debarment list, prevailing wage, Minority and Women Business Enterprise, Section 3 and federal acquisition and relocation regulations, as applicable.

Subrecipients were required to submit an audit and other documentation to establish their capacity, and any findings noted in the audit were reviewed with the applicant. Eligible applications were then considered for funding. Neighborhood Services Division staff reviewed quarterly performance reports and invoices throughout the year as part of desk monitoring. For CDBG public service activities, an on-site monitoring was conducted to ensure compliance. These reviews included both a fiscal and programmatic review of the subrecipient's activities. The reviews determined that each subrecipient was in compliance with the program regulations and City contract. Areas of review included overall administration, financial systems, appropriateness of program expenditures, program delivery, client eligibility determination and documentation, reporting systems, and achievement toward achieving contractual goals. Following the monitoring visit, a written report was provided delineating the results of the review and any findings of non-compliance and the required corrective action.

Subrecipients were given 30 days to provide the City with corrective actions taken to address any noted findings. For CDBG capital projects, monitoring also included compliance with Regulatory Agreement requirements. For HOME funded activities, annual monitoring was conducted on renter occupied units to ensure that household income, rents and utility allowances were in compliance with applicable limits pursuant to the affordability covenant. For ownership units, annual monitoring of occupancy was conducted throughout the affordability period.

Citizen Participation Plan 91.105(d); 91.115(d)

Describe the efforts to provide citizens with reasonable notice and an opportunity to comment on performance reports.

In accordance with the City's adopted Citizen Participation Plan, a public notice was published in the *Irvine World News* on August 10, 2017, notifying the public of the availability of the Consolidated Annual Performance and Evaluation Report for a 15-day public review and comment period. A copy of the public notice is included in Appendix A.

The draft CAPER was available from August 28, 2017 to September 12, 2017 on the City's website and in the City of Irvine Community Development Department – Neighborhood Services Division located at 1 Civic Center Plaza, First Floor, Irvine, California, 92606.

A public hearing was conducted before the City Council on Tuesday, September 12, 2017 to solicit comments from residents and interested parties. A summary of any written or oral comments received during the public hearing will be included in Appendix B to the final CAPER document.

CR-45 - CDBG 91.520(c)

Specify the nature of, and reasons for, any changes in the jurisdiction's program objectives and indications of how the jurisdiction would change its programs as a result of its experiences.

In review of the progress made toward accomplishing the goals established in the 2015-2019 Consolidated Plan – Strategic Plan during the Program Year, there is no need to change the program objectives or the projects and activities using CDBG funds.

CDBG-funded activities are contributing significantly to the City's progress toward meeting the high priority needs identified in the Strategic Plan. As shown in Table 1 on page 2 of this document, CDBG funds are contributing to seven of the nine Strategic Plan goals including Affordable Housing Preservation, Fair Housing Services, Homelessness Prevention Services, Senior Services, Special Needs Services, Youth Services and City of Irvine Public Facilities Improvements. No applications were received in response to the 2016 Notice of Funding Availability to address the Strategic Plan goal for Other Public Facilities Improvements.

The following paragraphs describe the CDBG-funded activity accomplishments for the 2016-2017 Program Year:

Affordable Housing Preservation

The Residential Rehabilitation Program provided six CDBG-funded loans and seven HOME-funded loans of up to $25,000 to homeowners to address critical home repair needs including, but not limited to, cabinetry, countertops, electrical work, flooring, heating and cooling, painting, plumbing, roofing, structural repairs, weatherization and disabled accessibility improvements. The Residential Rehabilitation Program ensures that any health and safety concerns or code violations are addressed as part of the rehabilitation project.

Fair Housing Services

The Fair Housing Services activity implemented by the Fair Housing Foundation provided 238 residents with services designed to affirmatively further fair housing choice through the provision of fair housing education, counseling, anti-discrimination and landlord-tenant mediation services. Outreach and education services provided in Irvine included booths at community events, coordination with local nonprofit community agencies, Certificate Management Training for rental housing managers, educational workshops for landlords, educational workshops for residents, dissemination of brochures and flyers containing fair housing information and public service announcements.

Homelessness Prevention Services

To support a continuum of services in Orange County to prevent and eliminate homelessness, CDBG funds helped Families Forward provide 202 residents with transitional housing and a comprehensive array of services such as counseling, career coaching, food, and life-skills education to address the needs of individual families. The Lakeview Aisle Transitional Housing for Emancipated Foster Youth program provided transitional housing and supportive services for three residents. The Homelessness Prevention Program operated by South County Outreach provided rent and utility payment assistance to help 59 residents avoid eviction from their homes or disconnection of utility services.

Senior Services

In an effort to promote independent living for senior citizens, Irvine Adult Day Health Services Skilled Nursing Care Program provided daily medical supervision and treatment intervention services to 85 seniors. Services included assessment and monitoring of blood pressure, Diabetic management, medication management, fluid and nutrition intake, hygiene, personal care needs, ambulation and safety and other conditions as needed to ensure the best possible health. Additionally, the National Charity League – Irvine Chapter Meals on Wheels program delivered nutritious meals to 238 homebound seniors during the Program Year.

Special Needs Services

Special Needs Services include, but are not limited to, those concerned with disabilities, domestic violence, veterans, substance abuse and HIV/AIDS. To assist residents with special needs, AIDS Services Foundation's HIV/AIDS Case Management and Support Services Program provided advocacy and facilitated access to vital medical and supportive services for 19 residents with HIV/AIDS. The Human Options Domestic Violence Services Program provided 62 residents with individual and group counseling and legal assistance to improve the safety and well-being of survivors of domestic violence.

Youth Services

To provide youth with appropriate health, fitness, recreational and educational services, the Operation School Bell program implemented by the Irvine Chapter of Assistance League International provided new school clothes and shoes, hygiene kits, backpacks, books and school supplies to 702 school children (K-12).

The Irvine Children's Fund Before and After School Child Care program provided 50 percent child care scholarships for 35 children attending before and after school child care sites located at Irvine Unified School District elementary schools.

The Irvine Public Schools Foundation implemented two programs benefitting 94 students during the Program Year, including the After School Enrichment Program and the Science Little League. The After School Enrichment program provided students in grades K-8 with classes in robotics, science, technology, chess, cartooning, sports and video game design during the academic year (September-June). The Science Little League program provided an intensive hands-on science program for students in grades 1-6 at their school site immediately after school during the spring.

City of Irvine Public Facilities Improvements

To improve City of Irvine public facilities serving seniors and residents with disabilities who are presumed under HUD regulations to be low- and moderate-income, the City invested over $800,000 of CDBG funds in the 2016-2017 Action Plan for the following projects:

- **Lakeview Senior Center Improvements:** This multi-year project will replace drainage systems and concrete at the rear patio area of the Lakeview Senior Center to address water intrusion and standing water that occurs during moderate rains. The project design and construction contract procurement was completed in June 2017. Construction completion is expected in Spring 2018.

- **Community Facilities ADA Improvements:** This project provided for the installation of ADA doors at the first floor lobby restrooms in City Hall and also provided for the installation of automated touchless faucets at 16 community and recreational facilities. This project was completed in June 2017.

Prior Year Capital Projects Completed During the 2016-2017 Program Year

During the 2016-2017 Program Year, three projects from the 2015-2016 Action Plan were completed. These projects meet the 2015-2019 Consolidated Plan goal to improve City of Irvine public facilities. The completed projects include:

- **Lakeview Senior Center Improvements:** This project replaced the refrigeration systems used for food storage at the Lakeview Senior Center where congregate meals are served and installed emergency backup lighting in the restrooms to improve safety in the event of a power outage. Construction work was completed spring, 2016, and administrative closeout procedures for the project continued into July, 2016. Therefore, this project is reported as complete in this 2016-2017 CAPER.

- **Rancho Senior Center Improvements:** This project provided for the installation of fire sprinklers, replacement of Heating Ventilation and Air Conditioning (HVAC) systems and the installation of emergency backup lighting in restrooms

to promote the comfort and safety of Irvine seniors participating in a wide variety of programs at the Rancho Senior Center. This project was completed May 2017.

- **Community Facilities ADA Improvements:** This project removed physical and architectural barriers to accessibility at four Irvine public facilities including the Deerfield Community Center, Harvard Community Center, Heritage Park Community Center and Irvine Fine Arts Center. Accessibility improvements included, but were not limited to, restroom accessibility modifications, installation of handrails, signage, replacement door hardware, and other accessibility features at the service counters, drinking fountains and facility entrances. This project was completed in May 2017.

CR-50 - HOME 91.520(d)

Include the results of on-site inspections of affordable rental housing assisted under the program to determine compliance with housing codes and other applicable regulations

Maintaining HOME-assisted affordable housing is a high priority. During the Program Year, the Neighborhood Services Division inspected the HOME-assisted properties listed below to determine compliance with the housing codes and other applicable regulations. Where any deficiencies existed, the property owner and property management were notified to make repairs and Neighborhood Services Division staff followed up to ensure completion of the required repairs. The list of HOME-assisted affordable rental housing includes the name of the property, the total number of housing units and the results of on-site inspections conducted during the 2016-2017 Program Year.

- AbilityFirst – 24 units – passed
- Alegre Apartments – 104 units – passed
- Doria Apartments Phase I – 60 units – passed
- Doria Apartments Phase II – 74 units – passed
- Montecito Vista – 162 units – passed
- The Arbor at Woodbury – 90 units – passed
- Windrow Apartments – 96 units – passed

Provide an assessment of the jurisdiction's affirmative marketing actions for HOME units. 92.351(b)

Each of the HOME-assisted properties with more than five units maintains an Affirmative Fair Housing Marketing Plan. During annual monitoring, the annual Affirmative Fair Housing Marketing Report and waitlist are reviewed to ensure compliance with HUD requirements to affirmatively further fair housing choice.

Refer to IDIS reports to describe the amount and use of program income for projects, including the number of projects and owner and tenant characteristics

The City receipted $203,550.22 of HOME program income during the Program Year. These funds will be used for Residential Rehabilitation Program loans during the 2017-2018 Program Year.

Describe other actions taken to foster and maintain affordable housing. 91.220(k)

In the implementation of the 2016-2017 Action Plan, the City invested HOME funds to rehabilitate 13 housing units affordable to low- and moderate-income homeowners.

2016/2017

CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT

JULY 1, 2016 THROUGH JUNE 30, 2017

APPENDIX A

Public Notice

2016/2017

CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT

JULY 1, 2016 THROUGH JUNE 30, 2017

APPENDIX B

Summary of Citizen Participation Comments



2016/2017

CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT

JULY 1, 2016 THROUGH JUNE 30, 2017

APPENDIX C

IDIS Reports

2016/2017

CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT

JULY 1, 2016 THROUGH JUNE 30, 2017

APPENDIX D

Affordable Housing Developments

6.2

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: IRVINE BUSINESS COMPLEX TRANSPORTATION MITIGATION FEE PROGRAM UPDATE

Interim Director of Community Development

City Manager

RECOMMENDED ACTION

1) Receive staff report.
2) Reopen the public hearing, receive public input.
3) Close the public hearing.
4) City Council comments and questions.
5) Adopt — A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE UPDATED IRVINE BUSINESS COMPLEX (PA 36) TRANSPORTATION MITIGATION PROGRAM, INCLUDING AN UPDATE TO THE TRAFFIC IMPROVEMENT FEE PROGRAM FOR THE IRVINE BUSINESS COMPLEX, PURSUANT TO SECTION 9-36-14 OF THE ZONING ORDINANCE AND A MINOR MODIFICATION TO MITIGATION MEASURE 13-1 IN THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE 2010 IBC VISION PLAN ENVIRONMENTAL IMPACT REPORT

EXECUTIVE SUMMARY

The Irvine Business Complex (IBC) Transportation Mitigation Fee Program has been in place since 1992 and ensures development in the IBC pays its fair-share toward mitigation of transportation impacts generated by development. The 2015 IBC Vision Plan Traffic Study Update ("2015 Traffic Study Update") identified specific improvements necessary to mitigate traffic impacts resulting from development of the IBC. To determine the appropriate fee structure necessary to support the 2015 Traffic Study Update, a nexus study ("2015 Nexus Study Update") has been prepared pursuant to state law (AB 1600, State Mitigation Fee Act).

The IBC Transportation Mitigation Fee is applicable to both non-residential and residential development, and is collected upon issuance of building permits. The Fee Program is the City's only opportunity to collect funds from new development to finance required transportation mitigation as a result of said development. These mitigations are assumed to be in place and factored into all development project traffic studies in the IBC. Without this funding source, the required mitigation measures resulting from development will need to be funded from other City resources, ultimately residents and

taxpayers. The City Council considered this item on June 27, 2017, and continued it to allow for Transportation Commission review.

Since the the IBC Transportation Mitigation Fee Program was implemented in 1992, mitigation fees have funded many of the circulation improvements in the IBC. IBC roadway improvements completed since the original 1992 Fee Program are outlined in Attachment 5.

Since 2010, $8 million from this Fee Program has been allocated towards the construction of the pedestrian bridge over Jamboree Road at Michelson Drive. More than $19 million has been allocated towards the implementation of improvements at the intersections of Jamboree Road at Barranca Parkway and Jamboree Road at Main Street. Both of these intersection improvement projects are substantially complete with the final design phase and ready for construction upon completion of the project right-of-way phase.

Development in the IBC has been evaluated with the assumption that the Fee Program is in place and the required improvement projects are completed for the residents, visitors, and commuters that use the IBC. If the identified projects are not completed, the City will need to evaluate appropriate redress for the fees that have already been paid and revisit the negotiated agreements with the cities of Santa Ana, Costa Mesa and Caltrans District 12.

IBC Transportation Mitigation Program administration fees are included in the fee update calculation. Five percent of the program total has been identified for program administration to cover additional consulting fees (for updates to traffic and fee studies), inter-agency coordination, development monitoring and City Attorney services. Ten percent of the improvement costs have been allocated to address Transportation Management System enhancements. This includes trip generation surveys, ride-matching services, van-pooling and funding for the *i*Shuttle, among other services. A contingency cost of fifteen percent has also been included. This is an industry-standard percentage that covers unforeseen planning, alignment or project changes not included in the baseline cost estimates.

The complexity of the IBC projects, many of which require right-of-way acquisition and agreements with external agencies, dictates the timing of design and construction. An adequate fee program, containing sufficient readily available funding, supports flexibility toward implementing traffic mitigation projects, which are dependent upon the unknown timing of future development. These projects are programmed into the City's capital improvement budget with the annual update to the Strategic Business Plan to ensure that improvements are keeping pace with development approvals.

Staff recommends the City Council adopt the updated IBC Transportation Mitigation Fee Program, including the updated IBC Transportation Mitigation Fees.

ANALYSIS

Traffic improvements needed to mitigate transportation impacts from build-out of land uses in the IBC were identified in the certified IBC Vision Plan Environmental Impact Report (EIR) in 2010. Zoning Ordinance Section 9-36-14, which was adopted as a component of the IBC Vision Plan, required that the transportation impacts and mitigation measures be re-evaluated every five years. The first five-year traffic study update was completed in 2015. On November 15, 2015, the City Council amended the timing of the updates from five years to two by a 4-1 vote (Councilmembers Choi, Lalloway, Schott and Shea in favor; Councilmember Krom opposed).

The IBC Nexus Study Update is consistent with the principles and commitments of the IBC Vision Plan and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to mitigate the traffic impacts from that development. The objective of this study is to update development fees to financially support the implementation of identified mitigation improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the IBC Vision Plan. The fee will be updated every two years, consistent with the updated traffic study. During interim years, the fee will be updated based on the CCI, as stipulated in Section 9-36-14 of the Zoning Ordinance.

Table 1 (below) summarizes the costs included in the IBC Nexus Study Update. These costs are based on a combination of 1) detailed cost estimates for specific fair-share improvements identified in the 2015 Traffic Study Update (Attachment 1); 2) obligations to fund specific improvements within adjacent jurisdictions determined necessary to mitigate the impacts of the buildout of the IBC; and, 3) a continuing obligation to fund certain improvements identified in a prior fee program for the IBC adopted in 1992. Additionally, the costs include specific tasks required to implement and maintain the fee program consistent with the requirements of the IBC Vision Plan Element of the General Plan and requirements of the Zoning Ordinance. The proposed IBC Transportation Mitigation Fee program update assumes that development fees will fund up to 90 percent of identified improvement costs. Per City practice, it is assumed that the remaining 10 percent of the project costs will be covered by outside funding sources including federal, state and county programs.

Table 1: 2015 Updated IBC Vision Plan Traffic Fee Program Breakdown		
Needs for IBC Vision Plan Traffic Improvements		
Improvement Costs		
Based on 2015 IBC Traffic Study Update		
Irvine (90% of estimate assumed)	*$18,006,327*	
*Caltrans District 12**	*$6,585,299*	
2015 IBC Traffic Study Update Improvements	**$24,591,626**	**$24,591,626**
Remaining Existing General Plan Improvements		
Irvine (90% of estimate assumed)	*$16,577,451*	
Improvements in Santa Ana	*$52,670,912*	
Improvements in Costa Mesa	*$28,970*	
2015 Update - Remaining Existing General Plan Improvements	**$69,227,334**	**$69,227,334**
Subtotal: 2015 Update IBC Vision Plan Improvement Cost		**$93,868,960**
Existing IBC Traffic Funds Available		
*Current IBC Traffic Fund Balance***	*$46,838,863*	
*Capital Improvement Program funds that are currently appropriated for IBC Improvements ****	*($27,354,385)*	
Existing IBC Funds to be applied to the 2015 Fee Program***	**$19,484,478**	**($19,484,478)**
Subtotal: (Effective) 2015 Updated IBC Vision Plan Improvement Cost		**$74,384,482**
Other IBC Vision Plan Traffic Fee Program Costs		
Transportation Management Systems (10% of total fee)	*$7,438,448*	
IBC Program Administration (5% of total fee)	*$3,719,224*	
Contingency (15% of total fee)	*$11,157,672*	
Subtotal: Other Costs to the IBC Fee Program	**$22,315,345**	**$22,315,345**
Development Agreements (subject to fees identified in their agreements)		
Park Place DA	*($2,769,591)*	
Central Park West DA	*($1,233,998)*	
Subtotal: Existing Development Agreements	**($4,003,589)**	**($4,003,589)**
Total IBC Fees Required		**$92,696,238**

Source: HDR 2015 for Development of Improvement Costs; City of Irvine for Fund Balances

* Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)

** Includes remaining balance from 1992 IBC Traffic Fee Program Fund Balance, current IBC Vision Plan Traffic Fee Program Fund Balance, and Caltrans subfund

*** CIP allocation for funding of Jamboree Road/Barranca Parkway and Jamboree Road/Main Street improvements, and partial funding for the pedestrian bridge at Jamboree Road and Michelson Drive

Table 2 summarizes a fee comparison between 1992 fees (initial IBC Fee Program), 2009 fees (compounded annual adjustments to the 1992 fee), 2010 fees (developed as part of the IBC Vision Plan), 2016 fees (compounded annual adjustments to the 2010 fee) and proposed fees. If approved, the proposed fees would be effective for FY 2017-18.

Table 2: IBC Fee Comparison

Land Use	Unit	IBC Traffic Fee					Increase from 2016 (factor)
		1992	2009	2010	2016	Proposed***	
Total Residential*	DU	$3,734	$7,175	$1,862	$2,254	$4,697	2.08
Extended Stay	Rooms	$3,016	$5,795	$1,503	$1,820	$3,796	2.09
Hotel	Rooms	$4,883	$9,383	$2,435	$2,947	$6,140	2.08
Retail Mix	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Office	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Industrial Mix **	Sq. Ft.	$3.30	$5.85	$1.50	$1.82	$3.79	2.08
Mini Warehouse	Sq. Ft.	$1.85	$3.55	$0.97	$1.17	$2.44	2.09

Source: HDR 2015, City of Irvine
* Includes Density Bonus Units charged fees consistent with Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

As indicated in Table 2 above, the proposed fees would be roughly double the 2010 fee amounts. Even with this increase, the proposed fees would be approximately 35 percent lower than the fees in place in 2009. Factors contributing to the increase since 2010 include:

- Additional mitigation improvements were identified in the 2015 IBC Traffic Study Update that had not been identified as impacts in 2010 including:
    - Von Karman/Tustin Ranch Road at Barranca Parkway and Von Karman Avenue at Alton Parkway
    - Loop Road/Park Avenue at Warner Avenue
    - Jamboree northbound ramps at Warner Avenue
    - Culver Drive at Alton Parkway
- Increases in costs were identified for several improvements previously identified in 2010. These are briefly discussed below:
    - Alton Overcrossing at SR-55: An approximate two-fold increase from the 2010 cost is attributable to the project's updated 2014 final design costs.

  - Widening of Dyer Road between SR-55 NB on-ramp and Red Hill Avenue: More than two-fold increase from the 2010 cost is attributable to an updated cost estimate for ultimate improvements.
  - Widening of Red Hill Avenue between Main Street and MacArthur Boulevard: More than two-fold increase from the 2010 cost is attributable to an updated cost estimate for ultimate improvements.

- Increase of ROW support costs from five percent to 10 percent of construction costs, based on current trends in ROW acquisitions, have significantly increased the costs for improvements that require ROW acquisitions.

- Less remaining development intensity (residential units and non-residential square footage) subject to the fee.

- The fund balance was further reduced by settlement payments to the cities of Newport Beach and Tustin (per 2009 and 2010 agreements, respectively) and earmarked funds for improvements and payment to Caltrans (per 2011 agreement).

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its July 18, 2017 meeting, the Transportation Commission reviewed this matter and voted unanimously, with all members present, to continue the item to its August 15, 2017 meeting so that staff could provide information regarding the City's past success with grant funding. On August 15, 2017, the Transportation Commission voted unanimously, with all members present, to recommend the City Council update the IBC fees based on the Construction Cost Index (CCI), which represents a six percent increase over the current IBC fees.

This recommendation would result in a $46.1 million (50 percent) shortfall in funding for the required mitigation improvements. It is important to clarify that the proposed CCI adjustment to the current fees are based on improvement costs established in 2010. This 2010 cost basis would not account for actual changes to improvement costs since that time- such as increased costs for right of way acquisition- which are reflected in the 2015 Nexus Study Update.

The City's success with grant funding awards for transportation related projects is shown in Attachments 3 and 4. The City of Irvine has received over $26 million in Measure M2 grant funding since 2011, with approximately $1.4 million of that amount awarded to IBC Capacity Enhancement Projects. A list of completed IBC Transportation Mitigation Fee Program projects is provided in Attachment 5. A list of all future IBC transportation mitigation projects to be funded by the fee program update is provided in Attachment 6.

The proposed fees are structured to fund 90 percent of the improvement cost, with the potential for the remaining 10 percent of the project cost to be covered by outside

funding sources; including federal, state and county programs. This percentage split has been previously approved by the City Council for prior updates. Based upon previous grant award success citywide, a 10 percent outside funding source assumption is reasonable.

PUBLIC OUTREACH

City staff met with IBC stakeholders on three occasions in May 2017 to present and discuss the proposed fee program update. Stakeholders expressed concerns regarding the overall increase in fees. The Building Industry Association of Orange County submitted a letter to this effect (Attachment 7).

ENVIRONMENTAL REVIEW

The project is within the general scope of the project described by previously certified Final EIR (SCH No. 2007011024). The State California Environmental Quality Act (CEQA) Guidelines, Section 15164, provides that an addendum may be prepared to a previously approved EIR when there are minor changes made to the project that do not trigger the conditions for a supplemental EIR as provided in Section 15162. Staff determined that the changes proposed in this action do not involve new significant environmental effects or increase the severity of previously identified impacts (Section 15162). The Final EIR as amended by the addendum is determined to be adequate to serve as the CEQA compliance document for the project. The addendum is attached for review and consideration (Attachment 8). Adoption of the proposed fee program will ensure a sufficient funding source for construction of the required transportation mitigation improvements, as mandated by CEQA.

ALTERNATIVES CONSIDERED

The City Council could choose not to adopt the updated fees, reduce the fees proposed, or delay adoption of the fee. In each of these possible alternatives, the City becomes responsible for funding the difference between the fees collected and the cost of improvements. This could result in an additional burden on taxpayers to help subsidize the cost of new development in the IBC. For example, approval of a CCI fee adjustment in-lieu of the recommended IBC Transportation Mitigation Fee Update (as recommended by the Transportation Commission) would result in a $46.1 million (50 percent) deficit to the developer funded portion of the fee program.

FINANCIAL IMPACT

As proposed, the IBC Transportation Mitigation Fee program will cover fair-share obligations for improvements located in adjacent jurisdictions and 90 percent of costs for improvements within the City of Irvine. The City will pursue funding from outside funding sources, such as federal, state and county grants, for the remaining 10 percent of costs. Based on a longstanding record of successfully securing outside funding at this level, it is not expected that the City will bear a financial responsibility for construction of

these improvements. Should this not be the case, the City will be responsible to come up with the remaining funds.

As stated in the Alternatives section above, should the new fee program be delayed or not adopted, the City, including residents and taxpayers, both within and outside of the IBC, will be responsible for funding the difference between the fees collected and the cost of the needed improvements. The City will not have the opportunity to collect these fees at a later date after building permits have been issued. As a result, if the recommended increases are not approved, future development and the City's taxpayers will likely bear an even greater cost to implement any remaining mitigation measures.

REPORT PREPARED BY Bill Jacobs, AICP, Principal Planner

ATTACHMENTS

Attachment 1: Irvine Business Complex Vision Plan - 2015 Five-Year Traffic Study Update (Executive Summary)
Attachment 2: Update to the Irvine Business Complex Vision Plan Traffic Fee Nexus Study
Attachment 3: Public Works Administered Grants: Transportation - All Programs
Attachment 4: Public Works Administered Grants: Transportation – Measure M / M2
Attachment 5: Completed IBC Roadway Improvements
Attachment 6: Summary Exhibit
Attachment 7: Letter from Building Industry Association of Orange County, dated May 31, 2017
Attachment 8: Addendum to the Irvine Business Complex Residential and Mixed-Use Vision Plan Draft Environmental Impact Report (SCH NO. 2007011024)
Attachment 9: CC Resolution 17-XX Adopting Updated IBC Transportation Mitigation and Fee program

ec: Mark Linsenmayer, Director of Transportation
Scott Smith, Deputy Director of Public Works
Jim Houlihan, City Engineer
Kerwin Lau, Project Development Administrator
Sun-Sun Murillo, Supervising Transportation Analyst
David Law, Principal Planner, Development Assistance Center
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Steve La Motte, Building Industry Association of Orange County
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Dee Snow, Garden Communities
Pamela Sapetto, Sapetto Group

Ken Wilhelm, LSA
Karen Blankenzee, Pacific Planning Group
Kimberly Brandt, Community Development Director, City of Newport Beach
Elizabeth Binsack, Community Development Director, City of Tustin
Adam Wood, Building Industry Association of Orange County

ES EXECUTIVE SUMMARY

ES.1.1 Introduction

This 2015 IBC Vision Plan Five-Year Traffic Study Update fulfills requirements of the City of Irvine Zoning Ordinance, which was updated as part of the 2010 IBC Vision Plan approval to require the City to re-evaluate traffic conditions (and traffic impact locations) by way of a five-year traffic study update (amended to every two years in October 2015). This five-year update evaluates potential traffic impact locations and documents how development actually occurred over the past five years to determine how close the Vision Plan assumptions were to forecasting this condition. The update takes a "snapshot" of the development activity today and considers ambient regional growth to compare with the 2010 assumptions. If as a result of actual development the original traffic impacts are altered or changed, the City has the ability to revise the list of traffic mitigations and IBC fees accordingly within the umbrella of the adopted Vision Plan.

This IBC Vision Plan Five-Year Traffic Study Update analyzes the potential impacts on the circulation system based on updated conditions to the 2010 amendment to the City of Irvine General Plan that placed a 15,000 dwelling unit limit (plus a maximum of 2,038 density bonus units pursuant to state law) on the residential development in the IBC area. Based on approvals since 2010, the total number of density bonus units assumed for this update is reduced to 1,794 from 2,038. This reduction represents 2,038 assumed theoretical density bonus units in 2010 less 244 theoretical units removed due to reduction in units not associated with any planned project.

The analysis presents areas of deficiency in the existing circulation system and future circulation systems and offers recommended mitigations to allow for a return to acceptable levels of service (LOS) or to the pre-Vision Plan condition within the study area. The analysis focuses on the identification of updated potential traffic impacts on the current circulation system as it is transformed into a mixed-use community from its previous offerings of office, commercial, and industrial uses within the IBC area. This traffic study provides an assessment of the existing conditions in 2015, existing conditions with the updated Vision Plan assumptions, as well as future Interim Year (2020) and Buildout Year (post-2035) scenarios with and without the updated Vision Plan assumptions. A comparison of the impacted locations versus the impacted locations identified in the 2010 IBC Vision Plan Traffic Study is also performed.

To assess the impact of the land use changes since the implementation of the 2010 Vision Plan, a total of six scenarios were analyzed:

- Existing Conditions (using current traffic counts)
- Existing Conditions with updated assumptions of Vision Plan Buildout
- 2020 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- 2020 Cumulative Baseline plus updated Vision Plan assumptions anticipated to be constructed by 2020
- Post-2035 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- Post-2035 Cumulative Baseline with updated assumptions of Vision Plan Buildout

Table ES-1 shows the land use assumptions for each scenario

Table ES.1.1 – Land Use Assumptions

SCENARIO	MULTI-FAMILY RESIDENTIAL (DU)	RETAIL MIX (TSF)	HOTEL (ROOM)	OFFICE MIX (TSF)	INDUSTRIAL MIX (TSF)	MINI-WAREHOUSE (TSF)	EXTENDED STAY HOTEL (ROOM)
2015 Existing	7,060	1,384	2,322	26,639	13,934	379	474
2015 With Update	16,795	1,690	2,653	34,286	12,339	549	1049
2020 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
2020 Cumulative With Update	16,671	1,405	2,535	27,750	13,240	883	1049
Post-2035 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
Post-2035 Cumulative Baseline With Update	16,795	1,690	2,653	34,286	12,339	549	1049

ES.1.2 Traffic Impacts & Fair Share

A number of agreements were signed between the City of Irvine and adjacent jurisdictions during the 2010 IBC Vision Plan effort which required the City of Irvine to provide specific dollar amounts of infrastructure funding to each adjacent jurisdiction. These agreements were premised on the understanding that the Vision Plan had no additional responsibilities toward improvements identified, provided the residential unit cap within the IBC is not exceeded. These agreements are included in **Appendix A**.

The residential unit intensity cap has not increased since the 2010 study. This traffic study update is intended only to analyze the change in traffic conditions since the 2010 approval. Except as otherwise specified in those existing agreements with adjacent jurisdictions, the Vision Plan is not responsible for mitigating the improvements identified in this study update within the cities of Tustin, Newport Beach, Santa Ana, or for improvements on Caltrans facilities.

For the sole purpose of providing a reference point for comparison with the 2010 study, a fair-share methodology was used to evaluate what the financial participation of mitigating IBC Vision impacts would be in the absence of the above-mentioned agreements. The following methodology is applied:

- For plan update impacts within the City of Irvine, the IBC Vision Plan is fully responsible.
- For plan update impacts outside the City of Irvine, the IBC Vision Plan would participate on a fair-share basis.

All impacts referenced in this study update represent impacts as defined in the City of Irvine's Traffic Impact Analysis (TIA) Guidelines, adopted August 2004, or for locations outside Irvine, per the performance criteria for each affected agency.

The cost of improvements will be presented in a supplemental nexus report. Under future forecast conditions there are a number of deficient intersections. **Table ES 1.2** demonstrates the deficiencies, impacts, and fair-shares under each future scenario.

Table ES 1.2 – Intersection/Arterial Segment Impacts/Cumulative Deficiencies

ID	INTERSECTION	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
85	MacArthur Boulevard at Birch Street	Newport Beach				X		5.6%	No Share
723	Main Street at Segerstrom Avenue	Santa Ana				X		40.3%	No Share
728	Halliday East at Alton Parkway	Santa Ana				X		7.2%	No Share
36	Red Hill Avenue at El Camino Real	Tustin		X			10.7%		No Share
445	Tustin Ranch Rd at Warner Ave N	Tustin				X		15.7%	No Share
93	Tustin Ranch Road at Bryan Avenue	Tustin	X		X		0.3%	9.9%	No Share
111	Franklin Avenue at Walnut Avenue	Tustin	X		X		3.9%	3.5%	No Share
749	Park Ave at A Street	Tustin			X			1.5%	No Share
98	Von Karman Avenue at Alton Pkwy	Irvine				X			100.0%
144	Jamboree Road at I-405 SB Ramps	Irvine				X			100.0%
145	Jamboree Road at Michelson Drive	Irvine				X			100.0%
188	Harvard Avenue at Michelson Drive	Irvine				X			100.0%
229	Culver Drive at Alton Parkway	Irvine				X			100.0%
97	Von Karman Ave/Tustin Ranch Rd at Barranca Pkwy	Irvine				X			100.0%
234	Culver Drive at Michelson Drive	Irvine	X						No Share
135	Jamboree NB Ramps/Warner Ave	Irvine			X				100.0%
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	X		X				100.0%
ID	ARTERIAL SEGMENT	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
1326	Dyer Rd between SR-55 SB and SR-55 NB	Santa Ana		X		X	15.9%	21.3%	No Share

*Fair-share percentage is shown for informational and comparison purposes only

ES.1.3 Improvement Strategies

The IBC Vision Plan Traffic Study Update proposes improvements for all intersections (and one impacted arterial segment) within the study area that are identified as impacts as well as all forecast cumulative deficiencies. Due to the above-mentioned agreements with adjacent cities and Caltrans (other than in the City of Costa Mesa), contribution towards improvements identified at locations where the update has an impact outside the City of Irvine are provided for reference only. Improvement strategies have utilized other studies in adjacent jurisdictions and have been vetted through site analyses to propose improvements that are feasible and reasonable. **Table ES 1.3** displays the mitigation strategies for each deficient intersection within the IBC study area.

Table ES.1.3– Improvement Strategies

INTERSECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
2020 Impacts and Cumulative Deficiencies			
234	Culver Drive at Michelson Drive (cumulative deficiency)	Irvine	Improve EB to 2,2,0
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
36	Red Hill Avenue at El Camino Real (update impact)	Tustin	Reconfigure SB to 1.5,2.5,0**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**

INTERSECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th EBT**
P-2035 Impacts and Cumulative Deficiencies			
98	Von Karman Avenue at Alton Parkway (impact)	Irvine	Add 3rd NBT
135	Jamboree NB Ramps/Warner Avenue (cumulative deficiency)	Irvine	Restripe EB to 2,2,0
144	Jamboree Road at I-405 SB Ramps (impact)	Irvine	Improve EB to 2.5,0,2.5
145	Jamboree Road at Michelson Drive (impact)	Irvine	Add 3rd EBL, 3rd SBL, and WBT***
188	Harvard Avenue at Michelson Drive (impact)	Irvine	Improve SB to 2,2,0
229	Culver Drive at Alton Parkway (impact)	Irvine	Improve EB to 2,3,0
97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway (impact)	Irvine	Add 3rd NBT and convert De Facto to Standard NBR
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
85	MacArthur Boulevard at Birch Street (impact)	Newport Beach	Improve EB to 2 EBL and 2 EBT**
723	Main Street at Segerstrom Avenue (impact)	Santa Ana	Add 3rd NBT, De Facto NBR**
728	Halladay East at Alton Parkway (impact)	Santa Ana	Add 2nd EBT and 2nd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th WBT**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
445	Tustin Ranch Road at Warner Avenue North (impact)	Tustin	Improve NB to 0,2.5,1.5**
749	Park Ave at A Street (cumulative deficiency)	Tustin	Add 2nd SBL and 2nd WBL**

* Arterial Segment

** Improvement strategy provided for information and planning purposes only.

*** Alternative improvement strategy is implementation of the Jamboree/Michelson pedestrian bridge across Jamboree.

ES 1.4 Comparison of Impacts to 2010 Traffic Study

Table ES 1.4 shows the net overall result of fewer future impacts compared to the 2010 Vision Plan Study. The number of interim year forecast impacts reduce from 13 to 10. The number of Buildout year forecast impacts reduces from 41 to 22. Additional details are provided in **Chapter 8.**

Table ES 1.4 - Comparison of Number of Impacted Locations between 2010 IBC Traffic Study and 2015 Update

	Interim Year		Buildout Year	
Facility Type	**2010 Study**	**2015 Update**	**2010 Study**	**2015 Update**
Arterial Segments	0	1	1	1
Intersections	4	1	15	10
Freeway Mainline	4	6	14	5
Freeway Ramps	5	2	11	6
Total	13	10	41	22

In the 2010 Traffic Study the Interim year was 2015 and Buildout year was Post-2030 whereas in the current update study, the Interim year is 2020 and the Buildout year is Post-2035.

ES 1.5 Arterial System Deficiencies

Individual arterial segments that operate at a deficient LOS under daily conditions within the City of Irvine are candidates for peak hour analysis to determine performance during the AM and PM peak hour. The peak hour analysis conducted for each of the forecast future scenarios revealed no arterial segments operating at a deficient level in either peak hour within the City of Irvine. For arterial segments within the Cities of Newport Beach, Costa Mesa, and Tustin, daily arterial segment LOS analysis is valuable for long-range planning purposes

but the Cities do not assess segment deficiencies under daily conditions. Deficiencies are assessed at intersections at either end of the arterial segment. Intersection deficiencies for the IBC Vision have been assessed and conclusions discussed in the next section. Hence, there are no deficiencies or impacts expected in future forecast scenarios for arterial segments within Newport Beach, Costa Mesa, and Tustin.

In the City of Santa Ana, daily arterial volume-to-capacity ratio (V/C) analysis is used to assess deficiencies in the arterial network. An increase of 0.01 or more of the daily V/C ratio constitutes an impact when compared with the Baseline conditions. There were no impacted arterial segments in the interim year in the 2010 Traffic Study within the City of Santa Ana while one arterial segment is impacted in the 2015 Update in the Interim year:

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

In the Buildout year in the 2010 Study one arterial location was impacted:

- MacArthur Boulevard between Main Street and SR-55 SB in the City of Santa Ana

This MacArthur Boulevard widening no longer appears to be needed as forecast volumes drop from 51,000 ADT to 39,000 ADT in the 2015 update. In the Buildout conditions of the 2015 update one arterial location was impacted (also impacted in 2020):

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

ES 1.6 Intersection Deficiencies and Impacts

Analysis of the intersections was conducted for all intersections within the defined IBC Vision study area. For each jurisdiction, the established and published criteria for evaluating impacts have been employed in this study. Plan update impacts are identified for the study area using the methodology for each respective jurisdiction.

Table ES-1.5 compares the impacted intersections in both traffic studies for the Interim year. In the 2010 study four intersections were impacted whereas in the 2015 Update only one intersection is impacted.

Table ES-1-5 – Intersection Impacts - Interim Year (2010 Study vs. 2015 Update)

ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
145	Jamboree Rd at Michelson Dr	Irvine	PM	x		
234	Culver Drive at Michelson Drive	Irvine	PM			x*
62	Campus Dr at Bristol Street NB	Newport Beach	PM	x		
93	Tustin Ranch Rd at El Camino Real	Tustin	AM	x		
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	PM	x		x*
36	Red Hill Ave at El Camino Real	Tustin	PM			x
* Irvine cumulative deficiency			Sum	4	0	1
			Total Impacts (2010 Study)	4	Total Impacts (2015 Update)	1

Table ES-1.6 shows that while 15 intersections were impacted in Buildout in the 2010 Study only 10 are impacted in the 2015 Update build-out condition. The following three locations were impacted in both studies:

- # 85 - MacArthur Boulevard at Birch Street in Newport Beach
- #145 - Jamboree Road at Michelson Drive in Irvine
- #723 - Main Street at Segerstrom Avenue in Santa Ana

Two of the 2010 Study impacted locations #135 Jamboree Road at Barranca Parkway and #141 Jamboree Road at Main Street have programmed improvements that are expected to be completed by 2020. As noted previously these improvements have been incorporated into analysis which results in a satisfactory level of service and no impacts under all scenarios studied in the 2015 Update.

Table ES-1.6 – Intersection Impacts - Buildout Year (2010 Study vs. 2015 Update)

INT ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
12	SR-55 Frontage Road SB at Baker Street	Costa Mesa	AM	x		
13	SR-55 Frontage Road NB at Baker Street	Costa Mesa	AM	x		
62	Campus Drive at Bristol Street NB	Newport Beach	PM	x		
85	MacArthur Boulevard at Birch Street	Newport Beach	PM(both)		x	
543	Bristol at Segerstrom	Santa Ana	PM	x		
723	Main Street at Segerstrom Avenue	Santa Ana	PM(both)		x	
728	Halladay East at Alton Parkway	Santa Ana	AM&PM			x
730	Grand Avenue at Warner Avenue	Santa Ana	PM	x		
754	Red Hill Avenue at Carnegie Avenue	Tustin/Santa Ana	PM	x		
24	Newport Avenue at Walnut Avenue	Tustin	AM	x		
93	Tustin Ranch Road at El Camino Real	Tustin	AM	x		
445	Tustin Ranch Road at Warner Avenue N	Tustin	PM			x
97	Von Karman Ave/Tustin Ranch Rd at Barranca Pkwy	Irvine/Tustin	PM			x
98	Von Karman Avenue at Alton Parkway	Irvine	PM			x
134	Loop Road/Park Ave at Warner Avenue	Irvine/Tustin	PM	x		x**
135	Jamboree NB Ramps/Warner	Irvine	PM			x**
136	Jamboree Road at Barranca Parkway*	Irvine/Tustin	PM	x		
141	Jamboree Road at Main Street*	Irvine	PM	x		
144	Jamboree Road at I-405 SB Ramps	Irvine	AM			x
145	Jamboree Road at Michelson Drive	Irvine	PM(both)		x	
188	Harvard Avenue at Michelson Drive	Irvine	PM	x **		x
229	Culver Drive at Alton Parkway	Irvine	PM			x
232	Culver Drive at I-405 NB Ramps	Irvine	PM	x		
			Sum	12	3	7
			Total Impacts (2010 Study)	15	Total Impacts (2015 Update)	10

* Improvement currently programmed
** Irvine cumulative deficiency

The completion of the Tustin Ranch Road extension seems to have had an effect on the location of impacted intersections. Compared to the 2010 Study, traffic is drawn away from Red Hill Avenue and Jamboree Road onto Von Karman Avenue/Tustin Ranch Road. A noticeable progression of impacted and deficient intersections can be seen in the PM peak period as traffic heads north from the heart of the IBC using Von Karman Avenue that becomes Tustin Ranch Road and eventually accesses the Jamboree Road Expressway at the Warner Avenue Ramp. The progression of impacted/deficient intersections is:

- Von Karman Avenue at Alton Parkway (Irvine)
- Von Karman Avenue at Barranca Parkway (Irvine)

- Tustin Ranch Road at Warner Avenue North (Tustin)
- Loop Road/Park Avenue at Warner Avenue (Irvine/Tustin-Deficiency only)
- Jamboree Northbound Ramps at Warner Avenue (Irvine-Deficiency only)

ES.1.7 Freeway Mainline and Ramps

Table ES-1.7 compares the Interim Year impacted freeway mainline segments in both traffic studies. In the 2010 study four segments were impacted whereas in the 2015 Update six locations are impacted. Three of these locations all on I-405 between Jamboree Road and SR-55 are common in both studies.

Table ES-1.7 – Freeway Mainline Impacts - Interim Year (2010 Study vs. 2015 Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	SB	PM		x	
I-5	North of SR-55	NB	AM			x
SR-55	Dyer Road to Edinger Avenue	NB	AM			x
SR-73	Campus Drive to SR-55	NB	AM			x
			Sum	1	3	3
			Total Impacts (2010 study)	4	Total Impacts (2015 Update)	6

Table ES-1.8 compares the Buildout year impacted freeway mainline segments in both traffic studies. In the 2010 study fourteen segments were impacted whereas in the 2015 Update only five locations are impacted. Two of these locations are common in both studies.

Table ES-1.8 – Freeway Mainline Impacts - Buildout Year (2010 Study vs. 2015 Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-5	Jamboree Road to Tustin Ranch Road	NB	AM	x		
I-5	Jamboree Road to Tustin Ranch Road	SB	AM&PM	x		
I-5	Newport Avenue to SR-55	NB	AM	x		
I-5	North of SR-55	SB	AM	x		
I-5	Red Hill Avenue to Newport Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	SB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	NB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	SB	AM&PM	x		
SR-55	MacArthur Boulevard to Dyer Road	NB	PM	x		
SR-55	MacArthur Boulevard to Dyer Road	SB	AM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		x	
SR-55	Dyer Road to Edinger Avenue	NB	PM		x	
I-405	MacArthur Boulevard to SR-55	NB	AM&PM			x
I-405	MacArthur Boulevard to SR-55	SB	AM&PM			x
SR-55	McFadden St/Sycamore Ave to I-5	NB	PM			x
			Sum	12	2	3
			Total Impacts (2010 Study)	14	Total Impacts (2015 Update)	5

Table ES-1.9 compares the Interim year impacted freeway ramps in both traffic studies. In the 2010 study five ramps were impacted whereas in the 2015 Update only two locations are impacted. Both the 2015 Update ramps are on I-405 and were also impacts in the 2010 study.

Table ES-1.9 – Freeway Ramp Impacts - Interim Year (2010 Study vs. 2015 Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road	NB Off	AM	x		
SR-55	Victoria Street	NB Direct On	AM	x		
SR-73	MacArthur Boulevard	NB On	AM	x		
I-405	Jamboree Road	SB Off	PM		x	
I-405	Bristol Street	SB Loop On	PM		x	
			Sum	3	2	0
			Total Impacts (2010 Study)	5	Total Impacts (2015 Update)	2

Table ES-1.10 compares the Buildout year impacted freeway ramps in both traffic studies. In the 2010 study eleven ramps were impacted whereas in the 2015 Update only six ramps are impacted. Three of the ramps impacted in the 2015 Update ramps are on I-405 and were also impacts in the 2010 study.

Table ES-1.10 – Freeway Ramp Impacts - Buildout Year (2010 Study vs. 2015 Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Culver Drive	NB Off	AM	X		
I-405	MacArthur Boulevard	NB On	PM	X		
I-405	Jamboree Road	SB Off	AM/PM	X		
SR-55	Baker Street	NB Off	AM/PM	X		
SR-55	Baker Street	SB On	PM	X		
SR-55	MacArthur Boulevard	SB On Loop	PM	X		
SR-73	Campus Drive	NB On	PM	X		
SR-73	Jamboree Road	SB Off	AM/PM	X		
I-405	MacArthur Boulevard	NB Off	AM		X	
I-405	Bristol Street	SB Loop On	PM		X	
SR-55	Dyer Road	NB On Direct	PM		X	
I-405	Jamboree Road	NB Off	AM			X
SR-55	Dyer Road	NB Off	AM			X
SR-73	Campus Drive	SB Off	AM			X
			Sum	8	3	3
			Total Impacts (2010 Study)	11	Total Impacts (2015 Update)	6

ES.1.8 MPAH and General Plan Amendment

The results of this Five-Year Update study indicate that no additional proposed changes are required to the City of Irvine General Plan or Countywide Master Plan of Arterial Highways (MPAH). Since the adoption of the 2010 Vision Plan, the City of Irvine General Plan has been amended with the following downgrades, per the 2010 Vision Plan:

- Barranca Pkwy between Red Hill Avenue and Jamboree Road (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Pkwy and McGaw Avenue (downgraded from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgraded from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Pkwy and Main Street (downgraded from an 8-lane divided roadway to a 6-lane roadway)
- Alton Avenue between Red Hill Avenue and Jamboree Road (downgraded from a 6-lane divided roadway to 4-lane divided roadway)*
- Von Karman Avenue between Barranca Pkwy and Michelson (downgraded from 6-lane roadway to 4-lane roadway)*

The arterial segments of Alton Pkwy between Red Hill Avenue and Jamboree Road and Von Karman Avenue between Barranca Pkwy and Michelson Drive as identified with an asterisk in the list above, were also programmed into the County's Master Plan of Arterial Highways (MPAH) since the 2010 Vision Plan approval.

Although the 2010 Vision Plan Traffic Study stated that it was the City's intention to remove the Von Karman Avenue at the I-405 freeway HOV drop ramps, it was determined that the improvement was of regional significance and therefore remains part of the Post-2035 build-out baseline assumptions.

Consistent with the 2010 Vision Plan, the widening of Red Hill Avenue from four lanes to six lanes between MacArthur Boulevard and Main Street is assumed in the Post-2035 Build-out Baseline since it is the one missing roadway widening in IBC that is needed to fulfill the County's Master Plan of Arterial Highways (MPAH).

2015 Update to:

Irvine Business Complex Vision Plan Traffic Fee Nexus Study



June 07, 2017

Prepared for:

CITY OF IRVINE 1971

J17-0530 | **Prepared by** HDR **Inc.** in association with iteris **Inc.**

ATTACHMENT 2

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Executive Summary

This five-year update (2015 IBC Traffic Fee Nexus Update) is consistent with the principles of the Irvine Business Complex (IBC) Vision Plan and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to support that development. The objective of this study is to update development fees to financially support the implementation of identified improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the Vision Plan.

Pursuant to the requirements of AB 1600, this update ensures that it complies with the nexus determination requirement to:

- Identify the purpose of the fee;
- Identify the use to be funded by the fee;
- Determine the reasonable relationship between:
  - The use of the fee and the type of development paying the fee;
  - The need for the traffic improvements and the types of development on which the fee is imposed; and
  - The amount of the fee and the cost of the public facilities or portion of the public facilities (in this case, traffic improvements) attributable to the development.

The 2015 IBC Traffic Fee Nexus Study complies will all State legislative nexus requirements.

Table ES.1 summarizes the costs included in the 2015 IBC Traffic Fee Nexus Update. These costs are based on a combination of detailed cost estimates for specific fair-share improvements identified in the accompanying 2015 traffic study[1] (2015 IBC Traffic Study Update), obligations to fund specific improvements within adjacent jurisdictions as necessary to mitigate the impacts of the buildout of the IBC Vision Plan, and a continuing obligation to fund certain improvements identified in a prior fee program for the IBC adopted in 1992. Additionally, the costs include specific tasks required to implement and maintain the fee program consistent with the requirements of the IBC Vision Plan General Plan Amendment/Zoning Ordinance.

The proposed fee program assumes that development fees will fund up to 90% of identified improvement costs. It is assumed that the remaining 10% of the project costs will be covered by outside funding sources including federal, state, and county programs.

Table ES.2 summarizes a fee comparison between 1992 (at the onset of the IBC Fee Program), 2009 fees (developed through annual adjustments of the 1992 fee), 2010 fees (developed as part of the Vision Plan), 2016 fees (currently what the City charges developers – this is developed by applying annual adjustments to the 2010 fee) and proposed fees, effective beginning in the next FY 2017-18. Although the fees are significantly higher than the current 2016 fees, they still remain 31%-35% lower than 2009 fees.

[1] *Irvine Business Complex Vision Plan, 2015 Five Year Traffic Study Update, Iteris with HDR, 2016*

Table ES.1: 2015Updated IBC Vision Plan Traffic Fee Program Breakdown

Needs for IBC Vision Plan Traffic Improvements		
Improvement Costs		
Based on 2015 IBC Traffic Study Update		
Irvine (90% of estimate assumed)	*$18,006,327*	
Caltrans District 12	*$6,585,299*	
2015 IBC Traffic Study Update Improvements	$24,591,626	$24,591,626
Remaining Existing General Plan Improvements		
Irvine (90% of estimate assumed)	*$16,577,451*	
Improvements in Santa Ana	*$52,670,912*	
Improvements in Costa Mesa	*$28,970*	
2015 Update - Remaining Existing General Plan Improvements	$69,227,334	$69,227,334
Subtotal: 2015 Update IBC Vision Plan Improvement Cost		$93,868,960
Existing IBC Traffic Funds Available		
*Current IBC Traffic Fund Balance***	*$46,838,863*	
*Capital Improvement Program funds that are currently appropriated for IBC Improvements ****	*($27,354,385)*	
Subtotal: Existing IBC Funds to be applied to the 2015 Fee Program	($19,484,478)	($19,484,478)
Subtotal: (Effective) 2015 Updated IBC Vision Plan Improvement Cost		$74,384,482
Other IBC Vision Plan Traffic Fee Program Costs		
Transportation Management Systems (10% of total fee)	*$7,438,448*	
IBC Program Administration (5% of total fee)	*$3,719,224*	
Contingency (15% of total fee)	*$11,157,672*	
Subtotal: Additional Costs to the IBC Fee Program	$22,315,345	$22,315,345
Development Agreements (subject to fees identified in their agreements)		
Park Place DA	*($2,769,591)*	
Central Park West DA	*($1,233,998)*	
Subtotal: Existing Development Agreements	($4,003,589)	($4,003,589)
Subtotal: Total IBC Fees Required		$92,696,238

Source: HDR 2015 for Development of Improvement Costs; City of Irvine for Fund Balances
* Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
** Includes remaining balance from 1992 IBC Traffic Fee Program Fund Balance, current IBC Vision Plan Traffic Fee Program Fund Balance, and Caltrans subfund
*** CIP allocation for funding of Jamboree Road/Barranca Parkway and Jamboree Road/Main Street improvements, and partial funding for the pedestrian bridge at Jamboree Road and Michelson Drive

Table ES.2: IBC Fee Comparison

Land Use	Unit	IBC Traffic Fee					Increase from 2016 (factor)
		1992	2009	2010	2016	Proposed***	
Total Residential	DU	$3,734	$7,175	$1,862	$2,254	$4,697	2.08
Extended Stay	Rooms	$3,016	$5,795	$1,503	$1,820	$3,796	2.09
Hotel	Rooms	$4,883	$9,383	$2,435	$2,947	$6,140	2.08
Retail Mix	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Office	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Industrial Mix **	Sq. Ft.	$3.30	$5.85	$1.50	$1.82	$3.79	2.08
Mini Warehouse	Sq. Ft.	$1.85	$3.55	$0.97	$1.17	$2.44	2.09

Source: HDR 2015, City of Irvine
* Includes Density Bonus Units charged fees consistent with Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

The proposed fee is significantly higher than the 2010 fees and is attributable to the following factors:

- New improvement locations
- Significant increase in improvement costs between 2010 and 2015
- Fewer number of remaining development units (residential and non-residential) subject to fee
- Lesser remaining funds available from the IBC Traffic Fee Fund Balance, due to large payout to Cities of Newport Beach and Tustin (per 2009 and 2010 agreements respectively) and earmarked funds for improvements and payment to Caltrans (per 2011 agreement)

1 Introduction

1.1 Background

The City of Irvine established an Irvine Business Complex (IBC) Nexus Fee Program in 1992 (henceforth to be referred to as the 1992 Fee Program) to support the City's adoption of the more traffic intensive 1990 IBC Rezone General Plan Amendment (GPA) and Zone Code. The intent of the 1992 Fee Program was to support the implementation of specific improvements identified in a subsequent Environmental Impact Report (henceforth to be referred to as the 1992 EIR) prepared in conjunction with the 1992 rezoning actions. This approach is consistent with the City's General Plan Roadway Development Objective B-1 to "Plan, provide and maintain an integrated vehicular circulation system to accommodate projected local and regional needs."

In 2010, the City prepared the IBC Vision Plan (henceforth to be referred to as the Vision Plan), a GPA and Zone Change project to accommodate the ongoing shift in development patterns to improve the jobs-housing balance, and reduce vehicle miles travelled. In recent years, as development patterns within the IBC showed an increased demand for residential uses and a decreased demand for manufacturing and warehouse uses, The Vision Plan project, together with its accompanying EIR (Vision Plan EIR) were approved/certified by the Irvine City Council on July 13, 2010.

As part of the Vision Plan approval, the Zoning Ordinance was updated to require the City to re-evaluate traffic conditions (and traffic impact locations) and its impact on improvement needs, by way of a five-year traffic study update (amended to every two years in October 2015). In 2015, a five-year traffic study[2] (henceforth to be referred to as 2015 IBC Traffic Study Update) was completed to fulfil the requirements of the Zoning Ordinance. Based on the findings of the 2015 IBC Traffic Study Update, a new set of transportation improvements were identified. In this 2015 five-year fee/nexus update (henceforth to be referred to as 2015 IBC Traffic Fee Nexus Update), the fee structure and the nexus associated with the findings of the 2015 IBC Traffic Study Update, is being revised to accommodate the identified set of transportation improvements.

Subsequent to the completion of the Vision Plan, the City of Irvine entered into contractual agreements with the potentially affected jurisdictions/agencies (Caltrans District 12 and cities of Newport Beach, Santa Ana, Costa Mesa, and Tustin). Thus for this 2015 IBC Traffic Fee Nexus Update, only the fee associated with the findings of the 2015 IBC Traffic Study Update, were updated. The associated fair-shares and the nexus remained consistent with the 2010 Vision Plan Traffic Fee Nexus Study[3] (henceforth to be referred as Vision Plan Traffic Fee Nexus Study). This 2015 five-year update takes a "snapshot" of the development activity from the inception of the Vision Plan in 2010 to July 31, 2015, to evaluate the changes in land uses and traffic patterns, and subsequent improvement needs, resulting in the development of a proposed fee to be imposed effective fiscal year (FY) 2017-2018.

In 2010, the Vision Plan established two overlay zoning districts:

- Urban Neighborhood, in which residential mixed use was encouraged; and
- Business Complex, in which the existing allowable mix of non-residential uses was maintained.

The Vision Plan allowed for the buildout of 15,000 residential base dwelling units (DU) within the Urban Neighborhood Overlay Zone District, with a potential maximum of 2,038 additional density bonus units, pursuant to state law. In order to achieve the maximum residential development intensity contemplated under the Vision Plan, the Plan adopted a "flexible zoning" mechanism under which non-residential development intensity could be exchanged for residential development

[2] *Irvine Business Complex Vision Plan, 2015 Five Year Traffic Study Update, Iteris with HDR, 2016*

[3] *Irvine Business Complex Vision Plan Traffic Fee Nexus Study, Parsons Brinckerhoff, 2011*

intensity, thus achieving the maximum 15,000 DU (plus 2,038 DU pursuant to state law), by "offsetting" reduction of non-residential development intensity.

Based on approvals since 2010, the total number of density bonus units pursuant to state law assumed for this five-year update is reduced to 1,794 DU, down from the theoretical assumption of 2,038 DU in 2010. The accompanying 2015 IBC Traffic Study Update provided an assessment of existing, interim-year 2020 and buildout year Post-2035 with and without the updated land use conditions.

1.2 Purpose of the 2015 Update to the Vision Plan Nexus Study

Pursuant to requirements of the California Environmental Quality Act (CEQA), the City Council, as part of their approval of the Vision Plan in 2010, determined to make the City responsible to mitigate, where feasible, the impacts to the transportation system attributable to buildout of the Vision Plan. This 2015 IBC Traffic Fee Nexus Update is consistent with the principles of the Vision Plan Traffic Fee Nexus Study and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to support that development. Through equitable developer fees, the objective of this update is to financially support the implementation of identified improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the Vision Plan.

California's Mitigation Fee Act (AB 1600, Cal. Gov. Code §§ 66000-66009) creates the legal framework for local governments to assess new fees toward future development. Such fees require new development to pay its fair-share of the infrastructure cost necessary to serve new residents and businesses. AB 1600 stipulates that a local government must take the following steps to establish a nexus between a proposed fee and project impacts:

- Identify the purpose of the fee;
- Identify the use to be funded by the fee;
- Determine the reasonable relationship between:
    - The use of the fee and the type of development paying the fee;
    - The need for the traffic improvements and the types of development on which the fee is imposed; and
    - The amount of the fee and the cost of the public facilities or portion of the public facilities (in this case, traffic improvements) attributable to the development.

These principles closely emulate two landmark US Supreme Court rulings that provide guidance on the application of impact fees. The first case, Nollan v. California Coastal Commission (1987) 107 S.Ct. 3141, established that local governments are not prohibited from imposing impact fees or dedications as conditions of project approval provided the local government establishes the existence of a "nexus" or link between the exaction and the interest being advanced by that exaction. The Nollan ruling clarifies that once the adverse impacts of development have been quantified, the local government must then document the relationship between the project and the need for the conditions that mitigate those impacts. The ruling further clarifies that an exaction may be imposed on a development even if the development project itself will not benefit provided the exaction is necessitated by the project's impacts on identifiable public resources.

The second case, Dolan v. City of Tigard (1994) 114 S.Ct. 2309, held that in addition to the Nollan standard of an essential nexus, there must be a "rough proportionality" between proposed exactions and the project impacts that the exactions are intended to provide benefit. As part of the Dolan ruling, the US Supreme Court advised that "a term such as "rough proportionality" best encapsulates what we hold to be the requirements of the Fifth Amendment. No precise mathematical calculation is required, but the city (or other local government) must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development."

The combined effect of both rulings resulted in the requirement that public exactions must be carefully documented and supported. This requirement was reiterated by the provisions of the State of California Mitigation Fee Act and subsequent rulings in the California Supreme Court (Ehrlich v. City of Culver City (1996) 12 C4th 854) and the California Court of Appeal (Loyola Marymount University v. Los Angeles Unified School District (1996) 45 Cal.App.4th 1256).

The Vision Plan Traffic Fee Nexus Study satisfied the requirements of the State of California Mitigation Fee Act. Thus this update is not intended to re-analyze the nexus or the purpose, but is to review and revise the fee program based on the needs determined by the 2015 IBC Traffic Study Update.

The 2015 IBC Traffic Study Update analyzed the project study area presented in Figure 1.1. All improvements identified under the interim year 2020 and buildout Post-2035 conditions are located within this defined project study area. Consistent with the methodology used in the 2010 IBC Vision Plan Traffic Study (henceforth referred to as Vision Plan Traffic Study), the 2015 IBC Traffic Study Update identified specific mitigation measure improvements that mitigate unacceptable level of service (LOS) E and F to acceptable LOS of A-D, per the City's Traffic Impact Analysis (TIA) Guidelines (adopted August 2004) and per the performance criteria for each affected agency (Caltrans District 12 and cities of Newport Beach, Costa Mesa, Santa Ana, and Tustin).

For locations within the City of Irvine, 90% of the improvement costs are included in the fee program. For locations not under the City of Irvine's jurisdiction, a fair-share methodology is applied that considers fair-shares of improvement costs. The proportionate fair-shares of improvement costs in the City of Costa Mesa and Santa Ana, associated with remaining improvements from the City of Irvine's Genera Plan, are included in the Fee Program. A 2011 amended agreement with the City of Santa Ana, replacing the 1992 agreement between the two cities, identified specific improvements for which the City of Irvine is either partially or fully responsible for certain improvement and those associated improvement costs were included in this update. In 2009 and 2010, respectively, the City of Newport Beach and the City of Tustin entered into settlement agreements with the City of Irvine, where City of Irvine made a one-time lump-sum payment to each of the cities, as its fair-share contribution towards transportation improvements and absolved itself from any future financial or implementation obligation related to the Vision Plan buildout.

Based on the findings from the 2015 IBC Traffic Study Update and existing agreements between the City of Irvine and the affected jurisdictions and agencies, Figure 1.1 identifies the improvement locations and provides a brief description of each improvement.

Costs of improvements included in the fee program are based on 2016 dollars developed from Construction Cost Index (CCI), and recent relevant projects unit cost estimates for construction materials and labor, and right-of-way cost estimates. This is further discussed in Section 2, IBC Vision Plan – 2015 Update Traffic Fee Program Cost. Section 3, Fee Methodology, walks the reader through a step by step process of developing the proposed fee effective FY 2017-2018. Section 4, Establishing Nexus discusses in details of the nexus between a proposed fee and project impacts, and Section 5, Conclusion summarizes the findings of this update and provides recommendations.

Figure 1.1: IBC Vision Plan – 2015 Update – Location of Improvements



Source: HDR 2015

2 IBC Vision Plan – 2015 Update to Traffic Fee Program Cost

The 2015 IBC Traffic Fee Nexus Update includes costs required to implement physical improvements that achieve the following:

- Mitigate impacts identified through the 2015 IBC Traffic Study Update;
- Satisfy agreements with adjacent jurisdictions that require the construction of specific roadway improvements to diminish the impacts of the Vision Plan development on the roadway system; and
- Upgrade the roadway network to be consistent with the buildout of the City's General Plan Circulation Element.

All costs included as part of the 2015 IBC Traffic Fee Nexus Update comply with the City's policies and estimates based on the most recent aerial photography available, field reviews for determination of feasibility, recent unit costs from local projects, and CCI updates. For all improvements located within the City of Irvine, 90% of total costs are included in this update. It is assumed that the remaining 10% will come from outside funding sources, such as federal, state and county grants.

Consistent with the Vision Plan Traffic Fee Nexus Study, this update includes costs related to the management and implementation of the IBC Vision Plan Traffic Fee Program. These costs include implementing Transportation Management Strategies (TMS) to reduce vehicle volumes and associated impacts, IBC Vision Plan Traffic Fee Program administration and construction contingency costs. Incorporated into the mix are the fund amounts that are currently available in the fee program, which includes specific amounts that are earmarked for projects identified in the City's Capital Improvement Program (CIP) and Development Agreements (DAs) that are not subject to any fee update.

Table 2.1 presents the fees required by the traffic fee program to implement the IBC Vision Plan.

2.1 Agreement with the City of Newport Beach

Following the development of the Vision Plan, the City of Irvine entered a settlement agreement with the City of Newport Beach. Based on this agreement, executed on November 24, 2009, the City of Irvine paid a one-time sum of $3,650,000 to the City of Newport Beach to be used exclusively for the engineering, design, and construction of Jamboree Corridor improvements and other traffic improvements located within the Vision Plan study area. Details of this agreement are presented in Appendix A. At the time of the agreement, the Cities of Irvine and Newport Beach agreed that the amount of $3,650,000 constituted a fair-share obligation for the City of Irvine toward improvements in Newport Beach necessitated by the development of the Vision Plan. The agreement was drawn up on the premise that the City of Irvine will not be financially responsible for any mitigation caused by the buildout of the Vision Plan, provided the residential unit cap of 15,000 DUs (plus 2,038 DUs pursuant to state law) is not exceeded. Therefore no mitigation improvement costs were identified within the City of Newport Beach for inclusion in this fee update.

Table 2.1: 2015Updated IBC Vision Plan Traffic Fee Program Breakdown

Needs for IBC Vision Plan Traffic Improvements		
Improvement Costs		
Based on 2015 IBC Traffic Study Update		
Irvine (90% of estimate assumed)	*$18,006,327*	
Caltrans District 12	*$6,585,299*	
2015 IBC Traffic Study Update Improvements	$24,591,626	$24,591,626
Remaining Existing General Plan Improvements		
Irvine (90% of estimate assumed)	*$16,577,451*	
Improvements in Santa Ana	*$52,670,912*	
Improvements in Costa Mesa	*$28,970*	
2015 Update - Remaining Existing General Plan Improvements	$69,227,334	$69,227,334
Subtotal: 2015 Update IBC Vision Plan Improvement Cost		$93,868,960
Existing IBC Traffic Funds Available		
*Current IBC Traffic Fund Balance***	*$46,838,863*	
*Capital Improvement Program funds that are currently appropriated for IBC Improvements ****	*($27,354,385)*	
Subtotal: Existing IBC Funds to be applied to the 2015 Fee Program	($19,484,478)	($19,484,478)
Subtotal: (Effective) 2015 Updated IBC Vision Plan Improvement Cost		$74,384,482
Other IBC Vision Plan Traffic Fee Program Costs		
Transportation Management Systems (10% of total fee)	*$7,438,448*	
IBC Program Administration (5% of total fee)	*$3,719,224*	
Contingency (15% of total fee)	*$11,157,672*	
Subtotal: Additional Costs to the IBC Fee Program	$22,315,345	$22,315,345
Development Agreements (subject to fees identified in their agreements)		
Park Place DA	*($2,769,591)*	
Central Park West DA	*($1,233,998)*	
Subtotal: Existing Development Agreements	($4,003,589)	($4,003,589)
Subtotal: Total IBC Fees Required		$92,696,238

Source: HDR 2015 for Development of Improvement Costs; City of Irvine for Fund Balances
* Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
** Includes remaining balance from 1992 IBC Traffic Fee Program Fund Balance, current IBC Vision Plan Traffic Fee Program Fund Balance, and Caltrans subfund
*** CIP allocation for funding of Jamboree Road/Barranca Parkway and Jamboree Road/Main Street improvements, and partial funding for the pedestrian bridge at Jamboree Road and Michelson Drive

2.2 Agreement with the City of Tustin

On July 13, 2010, following the development of the Vision Plan and through consultation with the City of Tustin, an agreement was executed between the Cities of Tustin and Irvine. The agreement stipulated that in lieu of City of

Irvine's fair-share of the estimated costs of traffic improvements located within the City of Tustin and identified as mitigation measures required for buildout of the Vision Plan, the City of Irvine would contribute 12% of the construction contract award amount or $4,500,000, whichever was greater, and up to a maximum of $6,500,000, for the Tustin Ranch Road extension roadway improvement between Walnut Avenue and Warner Avenue, including the grade separation and loop at Edinger Avenue. The improvements at Tustin Ranch Road, including the grade separation, were completed at the time of this update, however, the loop at Edinger Avenue is pending completion. Irvine's final contribution towards improvements in Tustin was $4.5 million. Appendix B presents the 2010 Settlement Agreement between the City of Irvine and the City of Tustin. The agreement was drawn up on the premise that the City of Irvine will not be financially responsible for any mitigation caused by the buildout of the Vision Plan, provided the residential unit cap of 15,000 DUs (plus 2,038 DUs pursuant to state law) is not exceeded. Therefore no mitigation improvement costs other than costs for specific improvement locations shared with Irvine, were identified within the City of Tustin for inclusion in this fee update.

2.3 Agreement with City of Santa Ana

A 1992 agreement between the City of Irvine and the City of Santa Ana resulted from the 1992 EIR approval that identified Irvine as the responsible party for the following improvements:

- Full financial responsibility for the costs to widen Dyer Road from a six-lane divided arterial to an eight-lane divided arterial between Red Hill Avenue and the SR-55 northbound on-ramp, including the intersection of Red Hill Avenue at Dyer Road/Barranca Parkway. Consistent with all improvements for which the City of Irvine has sole financial responsibility, 90% of total costs for this improvement is included in the 2015 IBC Traffic Fee Nexus Update.
- 50% of the costs to build the Alton Parkway Overcrossing at SR-55 in the City of Santa Ana.

The need for these improvements, and the allocation of responsibility to fund the improvements, was created in part by the development contemplated in the 1992 IBC Zoning, and as such the improvements were included in the 1992 Fee Program. An amendment to the 1992 agreement was negotiated and signed between the cities on March 21, 2011Following the approval of the IBC Vision Plan. The agreement redefined the Alton Parkway Interchange at SR-55 as Alton Parkway Overcrossing at SR-55, and maintained the financial responsibility of the City of Irvine on the two above mentioned projects, consistent with the 1992 agreement. Appendix C presents detail of the 1992 Settlement Agreement and the subsequent amendment.

Preliminary engineering cost estimates indicate that the Dyer Road widening is expected to cost $25,011,301. This cost includes estimates for Class II bikes lanes through the length of the project extent, consistent with the findings from the Project Report[4]. The total cost of the redefined Alton Parkway Overcrossing at SR-55 is estimated at $60,184,755. This cost includes the following list of additional improvements identified as mitigation in an updated traffic study[5] completed in 2010:

- Intersection #44: Red Hill Avenue at Alton Parkway;
- Signalization of the intersection of Halladay Street at Alton Parkway; and
- Signalization of the intersection of Daimler Street at Alton Parkway

For this update 90% of the cost of Dyer Road widening ($22,510,171) is included in the fee update. Pursuant to the City of Irvine and City of Santa Ana agreement, 50% of the Alton Parkway Overcrossing at SR-55 project ($30,092,378) is included in this update. Other than these two improvements, the only remaining Existing General Plan improvement per the cities' agreement included in this update is Intersection #719: Flower Street at Segerstrom Avenue that identifies a fair-share contribution of 9.6%, consistent with the Vision Plan Traffic Fee Nexus Study. City

[4] *Project Report for the Dyer Road/Barranca Parkway Improvements (State Route-55 to Aston Street), RBF Consulting, 2004*

[5] *Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening in the Cities of Santa Ana and Irvine, KOA, 2010*

of Irvine's fair-share for implementing improvements at the intersection of Flower Street at Segerstrom Avenue is $68,364 (9.6% of $712,124).

Hence, the 2015 IBC Traffic Fee Nexus Update includes a total of $52,670,912 as funds that would be required to implement improvements within the City of Santa Ana.

Appendix D presents detailed layout and cost estimate worksheets for each improvement.

2.4 Agreement with City of Costa Mesa

Based on the existing agreement between the Cities of Irvine and Costa Mesa, executed in 1993 and presented in Appendix E, the fair-share contribution towards one remaining Existing General Plan improvement included in this update is SR-55 Frontage Road SB Ramps at Paularino Avenue that identifies a fair-share contribution of 2.4%, consistent with the Vision Plan Traffic Fee Nexus Study. City of Irvine's fair-share for implementing improvements at this location is $28,970 (2.4% of $1.2 Million).

Appendix D presents a layout and cost estimate worksheet for this location.

2.5 Agreement with Caltrans District 12

Following the development of the Vision Plan and through consultation with Caltrans District 12 (Caltrans), on January 25, 2011, the City of Irvine and Caltrans entered into an agreement that identified feasible strategies that Caltrans would employ as mitigation for traffic impacts caused by the project on Caltrans facilities. Based on the findings from the Vision Plan Traffic Fee Nexus Study, it was determined that the fair-share cost of implementing these improvements would be $7,025,962 and it would constitute the City of Irvine's fair-share obligation as identified in the agreement. Appendix F presents the 2011 Traffic Mitigation Agreement between City of Irvine and Caltrans. Since the completion of the Vision Plan, the City of Irvine has collected and earmarked $440,663 as payment towards Caltrans agreement. Hence, this 2015 IBC Traffic Fee Nexus Update rolls over $6,585,299 ($7,025,962 less $440,663) from the Vision Plan Traffic Fee Nexus Study, as part of the funding need for implementing improvements associated with the buildout of the Vision Plan.

2.6 Transportation Improvements within the City of Irvine

2.6.1 Based on the 2015 IBC Traffic Study Update

The 2015 IBC Traffic Study Update identified the following eight deficient locations for which improvements were identified (refer to Table ES1.2 in the 2015 IBC Traffic Study Update).

- Intersection #97: Von Karman Avenue/Tustin Ranch Road at Barranca Parkway;
- Intersection #98: Von Karman Avenue at Alton Parkway;
- Intersection #134: Loop Road/Park Avenue at Warner Avenue;
- Intersection #135: Jamboree NB Ramps at Warner Avenue;
- Intersection #144: Jamboree Road at I-405 SB Ramps;
- Intersection #145: Jamboree Road at Michelson Drive;
- Intersection #188: Harvard Avenue at Michelson Drive;
- Intersection #229: Culver Drive at Alton Parkway;

For the purpose of the fee update, cost estimates were developed at six of these locations. Cost estimates were not necessary for intersections #144 (Jamboree Road at I-405 SB Ramps) and #145 (Jamboree Road at Michelson Drive).

- Intersection #144 (Jamboree Road at I-405 SB Ramps) improvement costs were not included in the updated fee because this location is a Caltrans facility and is part of the $7 million agreement with Caltrans. The specific improvement identified for #144 in the Vision Plan Traffic Fee Nexus Study called for widening of this off-ramp to add an approach lane resulting in two-left turn lanes and three-right turn lanes for an approach length of 500 feet, with the City's responsibility identified as 21.6% of a $1.5 million project. The 2015 IBC Traffic Study Update recommended a slightly altered improvement that reassigns these approach lanes to provide two-left turn lanes, one-shared left/right turn lane, and two-right turn lanes, all within the previously determined ROW, hence minimally impacting project costs.
- Intersection #145 (Jamboree Road at Michelson Drive) improvement costs were not included in the updated fee as a specific line item cost because $8,237,407 in CIP funding has been allocated from the IBC Traffic Fee Program Fund Balance to cover a portion of the estimated $17.7 million total cost to implement the pedestrian bridge. The pedestrian bridge across the north leg of the southbound Jamboree approach was proposed as part of the Vision Plan EIR because lane addition improvements at the intersection were determined to be operationally infeasible.

In addition, the 2015 IBC Traffic Study Update identified the following three locations for signalization.

- Armstrong Avenue at McGaw Avenue;
- Gillette Avenue at Alton Parkway;
- Teller Avenue at Dupont Drive;

At the time this report was being prepared, signalization efforts at Armstrong Avenue at McGaw Avenue and at Teller Avenue at Dupont Drive were underway and therefore were not included in the updated fee calculations.

Consistent with the Vision Plan Traffic Fee Nexus Study, this update also assumes 90% of the total cost of improvements within the City of Irvine ($20,007,030) or $18,006,327. It is assumed that the remaining 10% may be funded with outside funding sources such as federal, state and/or county grants.

2.6.2 Existing General Plan Improvements

The remaining Existing General Plan improvement not yet built in the IBC is the widening of Red Hill Avenue between Main Street and MacArthur Boulevard from four lanes to six lanes.

Originally identified in the 1992 EIR and 1992 Fee Program as an improvement that widens the arterial from its existing four lanes to an eight-lane facility, the Vision Plan determined that widening of this segment of Red Hill Avenue from four lanes to six lanes provided adequate traffic circulation to accommodate project buildout. The 2015 IBC Traffic Study Update concurs with that finding and this widening improvement to six lanes is consistent with the City's General Plan Circulation Element updated as part of the Vision Plan effort. The 90% of the cost for this improvement is $16,577,451 (or 90% of the total cost of $18,419,390) is included in the fee program.

Appendix D presents detailed concept layouts and cost estimate worksheets for each improvement that is included in the fee update.

2.7 Existing IBC Fund Balance

The current IBC Traffic Fee Program fund balance is the combination of the remaining funds from the 1992 Traffic Fee Program, balance of funds collected through the Vision Plan implementation since 2010, and earmarked funds

($440,663 – refer Section 2.5) allocated for Caltrans improvements per the settlement agreement with Caltrans. At the time of this update (i.e., snapshot date of July 31, 2015), the overall combined IBC Vision Plan Traffic Fee Program funds were $46,838,863.

As discussed in Section 2.6.1, $8,237,407 from this fund is allocated towards the construction of the pedestrian bridge over Jamboree Road at Michelson Drive. In addition, the City's CIP had allocated $4,766,978 towards the implementation of improvements at intersection #136 (Jamboree Road at Barranca Parkway) and intersection #141 (Jamboree Road at Main Street) from the IBC Traffic Fee Program fund. Subsequently, CIP funding for intersections #136 and #141 was augmented with an additional allocation of $14,350,000 ($5,030,000 for intersection #136 and $9,320,000 for intersection #141), bringing the total funding earmarked for these two intersections to $19,116,978. As these two intersection improvements were identified in the Vision Plan Traffic Study and 2010 Traffic Fee Nexus Study, and implementation was underway, these improvements were assumed to be constructed in terms of traffic analysis. Backing out the allocated funds for these committed improvements, the remaining IBC Traffic Fee Program funds available equaled $19,484,478 and this amount is applied towards this fee update. Table 2.2 summarizes the IBC fund balance applied towards this fee update.

Table 2.2: IBC Traffic Fee Funds applied towards 2015 Update*

Funds / Projects	Amount
IBC Vision Plan Traffic Fee Program funds	$46,838,863
Allocated funds for Jamboree/Michelson pedestrian bridge (included in CIP)	($8,237,407)
Allocated fund balance for Jamboree Road at Barranca Parkway, and Jamboree Road at Main Street improvements (included in CIP)	($19,116,978)
TOTAL	$19,484,478

*as of snapshot date of July 31, 2015
Source: City of Irvine

2.8 Other IBC Vision Plan Traffic Fee Program Costs

Consistent with the Vision Plan Traffic Fee Nexus Study, costs associated with Transportation Management Systems (TMS) are included in this update and will be reevaluated as part of the next two-year update. The TMS costs are estimated at 10% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, or approximately $7.44 million. As documented in the Vision Plan EIR, Project Design Feature (PDF 13-1) addresses the goals and objectives of the TMS as follows:

- Monitor travel demand at employment sites and provide reports on trip generation to the City;
- Offer employers and property owners assistance with transportation services on a voluntary basis;
- Deliver transportation services to commuters including a) ride-matching, transit/Metrolink information, b) inform commuters of incentives that may be available from public agencies, c) formation of vanpools;
- Represent the IBC in local transportation matters; and
- Oversee and fund the implementation and expansion of the i-Shuttle.

Program Administration costs are assumed in the fees as 5% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, for an amount of approximately $3.72 million to cover the next two years of staff and consultant time for administering annual fee updates, monitoring/updating the IBC database, inter-departmental and inter-agency coordination, reassessment of land use assumptions and reassessment of the Vision Plan and improvement list as required every two years, starting from this update cycle. Administration costs will also be reevaluated with the next two-year update.

Contingency costs (a standard practice in the industry to cover inflation rates and unforeseen costs) over the 20-year period are estimated at 15% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, for an amount of approximately $11.16 million.

The summation of theseother IBC Vision Plan Traffic Fee Program costs for this update equals $22,315,345.

2.9 Development Agreement Cost Reduction

Development Agreements (DAs) currently exist between the City and the following five developments located in the IBC:

- Park Place;
- Central Park West;
- Hines;
- Avalon Apartments; and
- Alton Condominiums

The DAs specify the fees that were locked-in at the time of approval of each specific project. Consistent with the Vision Plan Traffic Fee Nexus Study, it is assumed for this update that two of the developers (Park Place and Central Park West) will continue to pay fees identified in their DAs. Therefore their related fees in the amount of approximately $4 million ($2,769,591 for Park Place and $1,233,998 for Central Park West) and the land use intensity associated with these fees were deducted from the calculation of the proposed updated fees. The intensity and related fees for the remaining three DAs (Hines, Avalon Apartments and Alton Condo) were included in the calculation of the updated fee.

3 Fee Methodology

The methodology used for this fee update is consistent with the Vision Plan Traffic Fee Nexus Study and each step for fee calculations is discussed in detail in the following sections.

3.1 Step 1: Identify Traffic Improvements and the IBC Fair-share

The mitigation measure improvements identified in the 2015 IBC Traffic Study Update to be included for the 2015 IBC Traffic Fee Nexus Update, are presented in Table 3.1. The improvements address project-related impacts based on thresholds of significance described in the traffic study. Improvements in Newport Beach and Tustin, with whom the City of Irvine has separate agreements are excluded from Table 3.1. As discussed previously in Section 2.3 and Section 2.4, select improvements in Santa Ana and Costa Mesa are included.

Table 3.1: Updated IBC Vision Plan Improvement List

Int ID	Intersection / Arterial Location	Jurisdiction	Improvement Strategy
97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway *	Irvine	Add 3rd NBT and convert de facto right-turn to standard NBR
98	Von Karman Avenue at Alton Parkway *	Irvine	Add 3rd NBT
134	Loop Road/Park Avenue at Warner Avenue	Irvine	Add 3rd EBT and NBR overlap
135	Jamboree NB Ramps/Warner Avenue	Irvine	Add 2nd EBL
188	Harvard Avenue at Michelson Drive	Irvine	Widen SB to 2,2,1
229	Culver Drive at Alton Parkway	Irvine	Improve EB to 2,3,0 (de facto right)
	Red Hill Avenue between Main Street and Mac Arthur Boulevard	Irvine	Widen from 4 lanes to 6 lanes.
	Gillette Avenue at Alton Parkway	Irvine	New traffic signal (T-intersection)
	Alton Overcrossing at SR-55	Santa Ana**	SR-55/Alton Parkway Overcrossing Project plus the following improvements: • Intersection #44: Red Hill / Alton (Add 1 NBR, convert de facto SBR to 1 SBR, add 2nd EBL, convert 1 WBR to free WBR) • Signalization and widening of Halladay Street / Alton Parkway • Signalization at Daimler Street / Alton Parkway
	Dyer Road widening between SR-55 NB on ramp and Red Hill Avenue (Phase 2)	Santa Ana**	Dyer Road widening from SR-55 to Red Hill Avenue (consistent with Barranca-Dyer Project Report)
719	Flower Street and Segerstrom Avenue	Santa Ana	Add eastbound de facto lane
10	SR-55 Frontage Road SB Ramps at Paularino	Costa Mesa	Improve Southbound to 1.5 Left, 1.5 Through, 1 Right.

Source: HDR 2015

* Due to close proximity of improvements, for cost development, these two locations were combined and treated as one contiguous corridor on Von Karman Avenue between Alton Parkway and Barranca Parkway/Tustin Ranch Road.

**Agreement with Santa Ana.

3.2 Step 2: Estimate Total Cost to Implement 2015 IBC Improvement List

In order to implement the improvements identified in the 2015 IBC Traffic Study Update, a total cost of $92,696,238 (see Table 2.1) must be programmed into this fee update effort. This cost includes the cost of the improvements, roll over from the Caltrans agreement (see Section 2.5), deduction of the available fund balance from the IBC Traffic Fee Program (see Table 2.2), project soft costs (see Section 2.8) and deduction of fees related to the two existing Development Agreements (see Section 2.9).

Based on the preliminary engineering and cost estimates, the cost of the needed improvements is $93,868,960 and includes the following:

- 90% of costs related to improvements within City of Irvine and Santa Ana (widening of Dyer Road per agreement between City of Santa Ana and Irvine);
- Fair-share obligation to improvements in Santa Ana and Costa Mesa (remaining GP improvements); and
- Roll over of fair-share obligations pursuant to the Caltrans agreement from 2010.

Table 3.2 presents the list of improvement locations, along with project cost for each, City of Irvine's share and cost of improvements included in the 2015 IBC Traffic Fee Nexus Update.

Preliminary engineering layouts and detailed cost estimates were developed for each improvement. All improvement strategies identified to mitigate traffic impacts caused by the buildout of the Vision Plan were vetted through a review process with City of Irvine planning and engineering staff and were determined to be feasible. The following section discusses in detail the methodology for developing cost estimates.

3.2.1 Development of Improvement Costs

For the purpose of developing planning level cost estimates for each of the improvements, unit costs and planning level concept plans were developed. The concept level plans were based off most recent aerial imagery and field reconnaissance.

<u>Unit Cost Development</u>

Unit costs including ROW costs were reviewed and updated based on Caltrans cost data for 2015 and bid data provided by the City between 2013 and 2015. The 2015 unit costs were compared to the 2010 unit costs for reasonability and the following changes were made to the soft cost:

- ROW support costs were increased from 5% to 10% of construction costs
- Minimum Project Development cost was increased from $200,000 to $300,000

Table 3.2: Updated IBC Vision Plan Improvement List and Associated Cost for Fee Calculation

Int ID	Intersection / Arterial Location	Jurisdiction	Cost	Fair Share	Cost included for Fee Calculation
97 *	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway [1]	Irvine	$7,558,713	90%	$6,802,842
98 *	Von Karman Avenue at Alton Parkway [1]	Irvine		90%	
134	Loop Road/Park Avenue at Warner Avenue [1]	Irvine	$5,411,023	90%	$4,869,921
135	Jamboree NB Ramps/Warner Avenue [1]	Irvine	$2,592,998	90%	$2,333,698
188	Harvard Avenue at Michelson Drive [1]	Irvine	$2,752,766	90%	$2,477,489
229	Culver Drive at Alton Parkway [1]	Irvine	$1,204,030	90%	$1,083,627
	Red Hill Avenue between Main Street and Mac Arthur Boulevard [2]	Irvine	$18,419,390	90%	$16,577,451
	Gillette Avenue at Alton Parkway [1]	Irvine	$487,500	90%	$438,750
	Alton Overcrossing at SR-55 [3]	Santa Ana	$60,184,755	50%	$30,092,378
	Dyer Road widening between SR-55 NB on ramp and Red Hill Avenue (Phase 2) [3]	Santa Ana	$25,011,301	90%	$22,510,171
719	Flower Street and Segerstrom Avenue [4]	Santa Ana	$712,124	9.6%	$68,364
10	SR-55 Frontage Road SB Ramps at Paularino [5]	Costa Mesa	$1,207,101	2.4%	$28,970
				Cost of Improvements	$87,283,661
				Caltrans agreement roll over **	$6,585,299
				2015 Update IBC Vision Plan Improvement Cost	$93,868,960

Source: HDR 2015
* Due to close proximity of improvements, for cost development, these two locations were combined and treated as one contiguous corridor on Von Karman Avenue between Alton Parkway and Barranca/Tustin Ranch Road
** Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
[1] Irvine improvements - full financial responsibility to be funded at 90% through IBC Traffic Fee Program funds
[2] Irvine improvements - remaining Irvine General Plan improvement to be funded at 90% through IBC Traffic Fee Program funds
[3] Santa Ana improvements – full or financial responsibility per agreement
[4] Santa Ana improvements - remaining Irvine General Plan improvement for which City of Irvine has a fair share
[5] Costa Mesa improvements - remaining Irvine General Plan improvement for which City of Irvine has a fair share financial responsibility

Concept Development and Cost Estimates

Planning level concepts were developed based on publicly available "off the shelf" current aerial imagery. Utility identification, including sewer and overhead electrical lines, were determined to the extent possible from publicly available aerial photography. Length of turn pockets where needed was determined based on traffic data where appropriate. Consistent with the Vision Plan Traffic Fee Nexus Study, cost estimates included provisions for the following:

- Preliminary Project Development
- ROW Management
- Design Engineering/Administration Cost
- Construction Engineering Costs/Administration

- Construction Contingency

3.3 Step 3: Identify Remaining IBC Traffic Fund Revenues and Soft Costs to Determine Total Fee for 2015 Update

Based on the discussion in Section 2.7 and data presented in Table 2.2, an amount of $19,484,478, (effective IBC Traffic funds available to be applied toward the 2015 Fee Program) was subtracted from the total needs cost of $93,868,960 shown in Table 3.2.

Other IBC Traffic Fee Program costs, estimated at $22,315,345 and discussed in detail in Section 2.8 were added to the difference between improvement cost needs and the existing available IBC Traffic Fee Program Fund balance ($74,348,482). Finally, fees paid and those that will be paid by developers pursuant to their Development Agreements (DAs) in the amount of $4,003,589, were subtracted from the total value. Table 3.3 summarizes the value for each of the items that determine the final amount of $92,696,238 that must be programmed into this fee update effort.

Table 3.3: Summary of IBC Traffic Fee Update Cost Elements

Items	Cost
2015 Update IBC Vision Plan Improvement Cost*	$93,868,960
Existing IBC Traffic Fee Program Funds (amount to be subtracted)	($19,484,478)
(Effective) 2015 Updated IBC Vision Plan Improvement Cost	$74,384,482
Other IBC Traffic Fee Program (Transportation Management Systems, IBC Program Administration, Contingency)	$22,315,345
Development Agreements (amount to be subtracted)	($4,003,589)
Total Amount to be programmed for the 2015 Fee Update	$92,696,238

* includes Caltrans roll over
Source: HDR 2015

3.4 Step 4: Estimate the Remaining Development subject to 2015 Traffic Fee Update

Based on a thorough review of the City of Irvine IBC database records and Development Agreements (DAs), the remaining developable land uses under the Vision Plan buildout condition were quantified to define appropriate land use fees to fund the transportation improvements identified for this update.

Existing land uses as of the July 31, 2015 snapshot and forecast Year 2035 Vision Plan buildout land uses were applied in the determination of the land use specific traffic impact fees. Consistent with the underlying approach behind the development of the Vision Plan, increases in residential density throughout the IBC result in an overall reduction of non-residential uses (i.e., manufacturing, warehouse and mini-warehouse uses). The Vision Plan approved a residential cap of 15,000 base units plus a maximum potential of 2,038 density bonus units pursuant to state legislation. Based on approvals since 2010 and consistent with the 2015 IBC Traffic Study Update, the total number of density bonus units equals 1,794 DU, less than the 2,038 DU maximum, bringing the total number of DUs to 16,794 DUs, instead of 17,038 DUs assumed in 2010. The 2015 Traffic Fee Nexus Update also assumed that all remaining density bonus units will be charged fees consistent with the market-value base units.

In determining the remaining development subject to traffic impact fees, previous DAs and prepaid fees were considered. In 2005, the City of Irvine included an option for developers to prepay fees for projects under consideration to avoid updated fee adjustments that might occur subsequent to the 2005 update. Developers took advantage of this option and fees were paid for DUs and office equivalency square footage (SF). While there may be prepayment for specific projects that did not move forward based on the past fluctuating economic climate, the prepayment remains valid for future development projects for those identified parcels. As a result, these units and office equivalency SF were excluded from this update. In addition, for the following three developments, fees were paid after the "snap-shot" date for this update (July 31, 2015). Hence, the quantities associated with these developments were included for the 2015 update, however, the prepaid fees from these developments will remain valid and these developments will not be subject to new fees developed through this update.

- 16103 Derian Avenue (formerly 17275 Derian Avenue)
- 360 Fusion (formerly Murphy Apartments, 2852 McGaw Avenue, 17321-17351 Murphy Avenue)
- Main and Jamboree Apartments (2699-2719 White Road, 2772 Main Street)

3.4.1 Dwelling Unit Distribution – 2015 Update

This section presents the status of the maximum allowable dwelling units (DUs) within IBC. The land use assumption for the 2015 IBC Traffic Study Update assumes a total of 7,060 DUs (6,676 base DUs plus 384 density bonus DUs) on the ground in 2015, and 16,794 DUs (15,000 base DUs plus 1,794 density bonus DUs) in buildout Year 2035. Table 3.4 presents a status breakdown of the remaining DUs between Year 2035 and Year 2015. At the time of this update, 122 DUs (60 base DUs and 62 density bonus DUs) did not have a status reported, i.e. were not under construction nor approved or pending. The table indicates that for much of the remaining IBC DUs, fees were prepaid, hence only a few developments remain that will be subject to the updated fees developed as part of this update effort.

Table 3.5 presents the breakdown of land use quantities that will be subject to the updated fee, and Appendix G presents details of developments by parcel.

Table 3.4: IBC Dwelling Unit Summary

Base Units	Density Bonus Units	Total	Details
15,000	1,794	16,794	Maximum allowable DUs allowed for IBC Vision Plan Traffic Program
6,676	384	7,060	DUs on the ground in 2015
4,065	*23*	*4,088*	*DUs Existing at time of approval of Vision Plan*
2,611	*361*	*2,972*	*DUs Existing (on the ground) between 2010 and 2015*
Breakdown of Remaining Units between Year 2035 and Year 2015			
Base Units	Density Bonus Units	Total	Details
8,324	1,410	9,734	Remaining DUs between Year 2015 and Year 2035
8,264	1,348	9,612	Total DUs: under construction/approved/pending
2,020	*323*	*2,343*	*Units Under Construction accounted between 2010 and 2015*
836	*228*	*1,064*	*Units Approved – IBC fees paid between 2010 and 2015*
600	*148*	*748*	*Units Approved – IBC fees paid after 07/31/15 snapshot date* *16103 Derian Avenue* *360 Fusion* *Main and Jamboree Apartments*
2,887	*312*	*3,199*	*Units Approved – no IBC fees paid*
8	*0*	*8*	*Units Approved - fees paid prior to 2010*
1,913	*337*	*2,250*	*Units In Process / Pending - no fees paid*
60	62	122	DUs not associated with known projects*

*as of the snapshot date of July 31, 2015
Source: City of Irvine

Table 3.5: Future Land Use Intensity Subject to the Updated Traffic Fee

	Base (DU)	Density Bonus (DU) *	TOTAL (DU)	Extended Stay (Rooms)	Hotel (Rooms)	Retail Mix (Sq. ft.)	Office (Sq. ft.)	Industrial Mix (Sq. ft.)	Mini Ware-House (Sq. ft.)
2010 Baseline (for reference)	4,779	232	5,011	174	2,322	1,341,002	174	14,700,922	348,056
2015 Baseline (on the ground conditions) [1]	6,676	384	7,060	474	2,322	1,384,000	26,639,000	13,934,000	379,000
2035 Buildout Cumulative with Project	15,000	1,794	16,794	1,049	2,653	1,690,000	34,286,000	12,339,000	549,000
Remaining Development (2015 to 2035)	8,324	1,410	9,734	575	331	306,000	7,647,000	-1,595,000	170,000
Central Park West and Park Place Development (not subject to updated fee per their individual DAs)	2,277	128	2,405	0	0	149,250	2,674,820	0	0
ADJUSTED Remaining Development between 2015 and 2035 (quantities reflect subtraction of intensity related to Central Park West and Park Place DAs) [2]	6,047	1,282	7,329	575	331	156,750	4,972,180	-1,595,000	170,000
Other Developments with prepaid fees prior to 07/31/15 snapshot date	*1,987*	*423*	*2,410*	*161*	*0*	*3,224*	*0*	*0*	*0*
REMAINING DEVELOPMENT SUBJECT TO UPDATED TRAFFIC FEE [3]	4,060	859	4,919	414	331	153,526	4,972,180	-1,595,000	170,000
LAND USE BREAKDOWN									
DEVELOPMENT AGREEMENTS									
Central Park West									
Existing (Fees Paid)	*646*	*0*	*646*	*0*	*0*	*0*	*0*	*0*	*0*
Under Construction (Fees Paid)	*16*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*613*	*0*	*613*	*0*	*0*	*26,688*	*0*	*0*	*0*
TOTAL	1,275	0	1,275	0	0	26,688	0	0	0
Park Place									
Existing (Fees Paid)	*1,442*	*232*	*1,674*	*0*	*190*	*0*	*0*	*0*	*0*
Under Construction (Fees Paid)	*861*	*128*	*989*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*787*	*0*	*787*	*0*	*0*	*122,562*	*2,674,820*	*0*	*0*
TOTAL	3,090	360	3,450	0	190	122,562	2,674,820	0	0

Table 3.5: Future Land Use Intensity Subject to the Updated Traffic Fee

	Base (DU)	Density Bonus (DU) *	TOTAL (DU)	Extended Stay (Rooms)	Hotel (Rooms)	Retail Mix (Sq. ft.)	Office (Sq. ft.)	Industrial Mix (Sq. ft.)	Mini Ware-House (Sq. ft.)
OTHER DEVELOPMENTS (INCLUDES HINES, AVALON BAY, ALTON CONDOS DAs)									
Approved (Fees Paid prior to 2010)	*8*		*8*						
Existing (Fees Paid)	*523*	*129*	*652*	*290*	*0*	*0*	*415,696*	*40,753*	*257,525*
Under Construction (Fees Paid)	*1,143*	*195*	*1,338*	*161*	*0*	*3,224*	*0*	*0*	*0*
Approved (Fees Paid)	*836*	*228*	*1,064*	*0*	*0*	*0*	*0*	*0*	*0*
Demolished/Pending Demo(Fees not paid)	*0*	*0*	*0*	*0*	*0*	*0*	*41,609*	*248,246*	*0*
In Process / Pending (Fees not Paid)	*1,913*	*337*	*2,250*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees Paid after 07/31/15) [4]	*600*	*148*	*748*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*1,487*	*312*	*1,799*	*0*	*0*	*15,500*	*785,000*	*0*	*0*
TOTAL	6,510	1,349	7,859	451	0	18,724	1,242,305	288,999	257,525

Source: City of Irvine
* Density Bonus Units will be charged fees consistent with the market value
[1] Quantities includes land use that was on the ground prior to 2015
[2] Backing out quantities for CPW and Park West (only "Under Construction" and "Approved")
[3] Obtained by subtracting quantities that are either "Under Construction" or "Approved" for which fees are already paid
[4] Developments that paid fees after the July 01, 2015 deadline. Hence the fees and associated LU intensity will be included in the fee calc, but these developments will not be subject to new 2017 fees

The remaining quantities of land use subject to the updated fees were determined based on the following procedures, with an example provided in Table 3.6 relating to the residential base units:

- 1: Calculate difference in land use quantities between Year 2015 and Year 2035.
- 2: Calculate land use quantities for Central Park West and Park Place DAs (see Section 2.9 for discussion) to be subtracted from the first procedure above.
- 3: Calculate quantities of land use from other developments where the developer has prepaid IBC fees within the "snap shot" period for this update, for subtraction from the second procedure above. For the three developments where fees were paid after the "snap shot" deadline, the quantities were included for the calculation, but these developments will not be subject to new fees.
    - Any quantities designated as "existing" in Table 3.5 and Table 3.6 were not subtracted because they were included in the quantities that represent Year 2015 on the ground conditions.

Table 3.6: Example Procedures to Determine Land Use Subject to Updated Fee

Procedure	Land Use Description	Quantities	Calculation
1.	Residential Land Use considered for 2015 Baseline	6,676 DU	
	Residential Land Use considered for 2035 Buildout	15,000 DU	15,000 – 6,676 = 8,324 DU
2.	Development Agreements (note: "existing" quantities were not subtracted because these are already included in the 2015 on the ground conditions (Baseline) Central Park West: 1,275 *Existing: 646 (not included in this calculation)* *Under Construction: 16* *Approved: 613* Park Place: 3,090 *Existing: 1,442 (not included in this calculation)* *Under Construction: 861* *Approved: 787*	(16+613) + (861+787) = 2,277 DU	8,324 – 2,277 = 6,047 DU
3.	Other Developments (note: "existing" quantities were not subtractedbecause these are already included in the 2015 on the ground conditions (Baseline); developments that paid fees after the 07/31/15 snapshot date were not subtracted) *Approved (fees paid prior to 2010): 8* *Existing: 523 (not included in the calculation)* *Under Construction (Fees Paid): 1,143* *Approved (Fees Paid): 836* *Demolished/Pending Demo(Fees not paid): 0* *In Process / Pending (Fees not Paid): 1,913* *Approved (Fees Paid after 07/31/15): 600* *Approved (Fees not paid): 1,487*	8+1,143+836 = 1,987 DU	6,047 – 1,987 = 4,060 DU

Source: City of Irvine, HDR

3.5 Step 5: Estimate of Total Development Intensity Value (DIV)

Since 1992, the IBC study area has had provisions in place to allow for Transfers of Development Rights (TDRs) through the creation of a Development Intensity Value (DIV) budget system in which an allocation of AM, PM and ADT DIVs are assigned to each property in the IBC. These DIVs must be transferred in blocks (AM, PM and ADT) to other properties through a conditional use permit process and accompanying traffic study. The total DIVs associated with the remaining development required for full buildout of the Vision Plan was calculated by applying the IBC trip generation rates to the land use quantities.

Table 3.7 presents the established DIV rates applied in this update and is consistent with those used for the Vision Plan Traffic Fee Nexus Study. Based on the remaining development subject to the updated traffic fee determined in Section 3.4, Step 4, multiplied by the IBC DIV rates, the total DIVs equate to 10,263 (refer to Table 3.8). Consistent with the methodology used for the Vision Plan Traffic Fee Nexus Study and previous IBC fee reports, the PM peak hour DIV rates were applied for all land uses because for a majority of the land uses, the PM peak hour rate is the maximum DIV rate. The PM peak hour rates represent the maximum DIV rate for all IBC land use categories with the exception of industrial and mini-warehouse uses; however for those uses, the DIV rates are significantly less in comparison to the other land uses.

Table 3.7: IBC Land Use DIV Rates

Trip Rate	Residential (per DU)	Extended Stay (per Room)	Hotel (per Room)	Retail Mix (per sq. ft.)	Office (per sq. ft.)	Industrial Mix (per sq. ft.)	Mini Warehouse (per sq. ft.)
PM Peak Hour	0.52	0.42	0.68	0.00696	0.00138	0.00042	0.00027

Source: City of Irvine, ITE, Table 4, IBC Vision Plan Traffic Fee Nexus Study, January 2011

The Vision Plan utilizes a flexible zoning concept, meaning that to account for the planned increase in residential units under the Vision Plan, quantities of planned land uses from other categories such as manufacturing and their associated development intensity would be reduced. This is the reason for the negative quantities (see row "Remaining Development (2015 to 2035)) identified in Table 3.5 and Table 3.8. If the quantities of land uses that were assumed to be developed under the IBC Vision Plan do not develop as planned, the PM peak hour trips associated with those land uses will be available for use for other types of development.

The Vision Plan is an overlay zone that allows for flexibility in land use development. Once the development intensity available in the IBC (identified in Chapter 9-36 of the Zoning Ordinance) is exhausted, no additional development can take place without a General Plan Amendment that intensifies the IBC planning area. The City of Irvine continues to monitor the development patterns in the IBC annually to evaluate how the Vision Plan is taking shape, to ensure that there is sufficient development intensity for the maximum assumed residential and mixed-use development. Subsequent to this update, the reassessment of the IBC Vision Plan Traffic Study will be conducted every two years, with the next update commencing in Fall 2017.

3.6 Step 6: Normalization of Retail and Office Land Uses

In accordance with established precedent in the City and consistent with the mixed-use vision, to encourage additional commercial and retail development in the IBC, the office and retail mix land uses have been normalized in the calculation of remaining developments subject to fee. Because the retail mix land use PM peak hour trip rate is significantly higher (over 5 times higher – 0.00696 for retail mix; 0.00138 for office) than the office land use, the fees for retail mix development are normalized, creating a fee structure in which retail mix and office square footage cost is equivalent. Table 3.8 identifies the normalization of DIVs and land use for office and commercial land uses.

3.7 Step 7: Estimate Cost per DIV

The cost associated per DIV to implement the Vision Plan improvements was calculated by dividing the total program cost by the total number of normalized DIVs that must participate in the funding program. Table 3.9 estimates that the cost per DIV will be $9,032.09. Table 3.10 presents the maximum development fees for each land use category through application of the cost per DIV to the normalized DIVs associated with each category.

Table 3.8: IBC Total DIVs

Land Use	Unit	Remaining Development Subject to Updated Fee	DIVs (rounded)	Remaining Development Subject to Updated Fee (normalized quantities)	Normalized DIVs (rounded)
Residential *	DU	4,919	2,558	4,919	2,558
Extended Stay	Rooms	414	174	414	174
Hotel	Rooms	331	225	331	225
Retail Mix	Sq. Ft.	153,526	1,069	2,562,853	3,965
Office	Sq. Ft.	4,972,180	6,862	2,562,853	3,965
Industrial Mix **	Sq. Ft.	-1,595,000	-670	-1,595,000	-670
Mini-Warehouse	Sq. Ft.	170,000	46	170,000	46
TOTAL DIVs			10,263		10,263

Source: HDR
* includes Base and Density Bonus Units, since Density Bonus Units will be charged as market (Base) units
** includes manufacturing and warehouse sq. ft.

Table 3.9: Cost Estimate per DIV

Total Traffic Fee Program Cost	$92,696,238
Total number of DIVs generated	10,263
Cost per DIV	$9,032.08

Source: HDR

Table 3.10: Traffic Fee Estimates for each Land Use Category

Land Use	Unit	Remaining Development Subject to Updated Fee (normalized quantities) *	Cost per DIV (rounded)	Normalized DIVs (rounded)	Development Fees (Maximum)
Residential	DU	4,919	$9032.08	2,558	$23,104,061
Extended Stay	Rooms	414	$9032.08	174	$1,571,582
Hotel	Rooms	331	$9032.08	225	$2,032,218
Retail Mix	Sq. Ft.	2,562,853	$9032.08	3,965	$35,812,197
Office	Sq. Ft.	2,562,853	$9032.08	3,965	$35,812,197
Industrial Mix ***	Sq. Ft.	-1,595,000	$9032.08	-670	-$6,051,494
Mini Warehouse	Sq. Ft.	170,000	$9032.08	46	$415,476
			TOTAL	10,263	$92,696,238

Source: HDR
* Obtained from Table 3.8
** includes Base and Density Bonus Units, since Density Bonus Units will be charged as market (Base) units
*** includes manufacturing and warehouse sq. ft.

3.8 Step 8: Estimate Cost per Development Unit

To establish the cost per development unit, the maximum fees associated with each land use determined in Section 3.7, Step 7 are divided by the quantity associated with each land use category. Table 3.11 represents the fee per measurable unit for each land use category.

Table 3.11: Traffic Fee Summary

Land Use	Unit	Remaining Development Subject to Updated Fee	Remaining Development Subject to Updated Fee (normalized quantities)	Development Fees (Maximum)	Updated Fee ***
Residential	DU	4,919	4,919	$23,104,061	$4,697
Extended Stay	Room	414	414	$1,571,582	$3,796
Hotel	Room	331	331	$2,032,218	$6,140
Retail Mix	Sq. Ft.	153,526	2,562,853	$35,812,197	$13.97
Office	Sq. Ft.	4,972,180	2,562,853	$35,812,197	$13.97
Industrial Mix **	Sq. Ft.	-1,595,000	-1,595,000	-$6,051,494	$3.79
Mini-Warehouse	Sq. Ft.	170,000	170,000	$415,476	$2.44
				$92,696,238	

Source: HDR 2015
* Includes Density Bonus Units that will be charged fees at the same rate as Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

Table 3.12 presents a fee comparison between the 1992 fees (at the onset of the IBC Traffic Fee Program), 2009 fees (developed through annual adjustments of the 1992 fee), 2010 fees (developed as part of the Vision Plan), 2016 fees (currently what the City charges developers – this is developed by applying annual adjustments to the 2010 fee) and proposed updated fees.

Table 3.12: IBC Fee Comparison

Land Use	Unit	IBC Traffic Fee					Increase from 2016 (factor)
		1992	2009	2010	2016	Proposed***	
Total Residential	DU	$3,734	$7,175	$1,862	$2,254	$4,697	2.08
Extended Stay	Rooms	$3,016	$5,795	$1,503	$1,820	$3,796	2.09
Hotel	Rooms	$4,883	$9,383	$2,435	$2,947	$6,140	2.08
Retail Mix	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Office	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Industrial Mix **	Sq. Ft.	$3.30	$5.85	$1.50	$1.82	$3.79	2.08
Mini Warehouse	Sq. Ft.	$1.85	$3.55	$0.97	$1.17	$2.44	2.09

Source: HDR 2015, City of Irvine
* Includes Density Bonus Units charged fees consistent with Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

As can be seen in Table 3.12, the proposed fee is significantly higher than the 2010 and 2016 fees. There are a few reasons behind this increase: (a) new improvements and increases to cost of improvements, (b) fewer developments remaining that are subject to updated fees, and (3) lower remaining funds in the IBC Traffic Fee Program.

Significant Increase in Improvement Costs between 2010 and 2016

- Unit costs have increased moderately between 2010 and 2016 (when the cost estimates were developed), contributing to increase of project cost.
- Increase of right of way (ROW) support costs from 5% to 10% of construction costs, based on current trends in ROW acquisitions, have significantly increased the costs for improvements that require ROW acquisitions.
- New improvements were identified in the 2015 IBC Traffic Study Update that had not been identified in the Vision Plan Traffic Study including:
    - Von Karman/Tustin Ranch Road at Barranca Parkway and Von Karman Avenue at Alton Parkway: Although identified as two separate deficient intersections, based on the geometrics of improvements, the proximity of these adjacent intersections and the efficiency of traffic flow between them, the cost estimate considered this improvement as a corridor improvements that considered widening of Von Karman Avenue between Barranca Parkway and Alton Parkway.
    - Loop Road/Park Avenue at Warner Avenue
    - Jamboree northbound ramps at Warner Avenue
    - Culver Drive at Alton Parkway

- Increases in costs were identified for a few improvements previously identified in the 2010 IBC Traffic Fee Nexus Study. These are briefly discussed below:
    - Alton Overcrossing at SR-55: The Vision Plan Traffic Fee Nexus Study included an estimate of $17.5 million (50% of a total $35 million cost) as the City of Irvine's fair-share contribution pursuant to the agreement with Santa Ana. However, for this update, the total cost has increased to $60 million, resulting in City of Irvine's fair-share contribution of $30 million (50% of the total $60 million cost). This approximate two-fold increase in cost is attributable to the project's current definition which includes additional improvements that must be included as part of the City of Santa Ana's Alton Overcrossing at SR-55 Capital Improvement Program (CIP) project based on an updated traffic study[6] conducted by the City of Santa Ana in 2010. The cost estimate for this Overcrossing project (without the additional improvement costs) was updated in 2014 and was estimated at $55.5 million. As part of the 2015 IBC Traffic Fee Nexus Update, the cost estimate at this location was developed considering the $55.5 million estimated cost plus the cost of the additional improvements resulting from Santa Ana's 2010 traffic study including improvements at intersection #44: Red Hill Avenue at Alton Parkway; signalization and widening of Halladay Street at Alton Parkway; and signalization at Daimler Street at Alton Parkway).
    - Widening of Dyer Road between SR-55 NB on-ramp and Red Hill Avenue: The cost included in the Vision Plan Traffic Fee Nexus Study was $9 million (90% of a total estimated $10 million) based on the Barranca Parkway/Dyer Road Project Report[7] prepared in 2004. With this update, the cost for this improvement increased significantly to $22.5 million (90% of a total cost of $25 million). The Project Report was revisited to ensure that the cost estimates reflected the continuation of the Class II bike lanes on either side of Dyer Road/Barranca Parkway between Red Hill Avenue and the SR-55 NB on-ramp. The necessary widening of Barranca Parkway/Dyer Road will result in partial takes of three properties located (1) west of the railroad tracks and south of Dyer Road; (2) west of Pullman Street and south of Dyer Road; and (3) west of Pullman Street and north of Dyer Road. The partial takes of these properties and the cost for Class II bike lanes add significant costs to the project.
    - Widening of Red Hill Avenue between Main Street and MacArthur Boulevard: For this update, the cost estimate for this improvement (90% of cost) is significantly higher ($18.4 million in 2016, vs. $8.7 million in 2010) due to higher ROW costs, and is attributable to the inclusion of the bike lanes on either side of Red Hill Avenue.

Fewer number of Remaining Development Units and Square Footage Subject to Fee

- As the Vision Plan gets implemented, the number of developable units remaining decreases, resulting in fewer quantities of land use subject to updated fees.
- Since 2005, developers have been taking advantage of the option of prepayment of fees for projects under consideration (see discussion in Section 3.4), thereby further reducing the developable units (residential and non-residential) subject to fee. A comparison with the Vision Plan Traffic Fee Nexus Study shows that the total number of DIVs in 2010 were 17% higher than in 2015, or in other words, the quantity of remaining

[6] *Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening in the Cities of Santa Ana and Irvine, KOA Corporation, 2010*

[7] *Project Report for the Dyer Road/Barranca Parkway Improvements (State Route 55 to Aston Street), RBF Consulting, 2004*

developable units and square footage in 2010 was greater than in 2015. The combination of developable units subject to fee and the higher cost of improvements contribute towards higher fees.

Lesser Remaining Available IBC Traffic Fund Balance

- The Vision Plan Traffic Fee Nexus Study recommended removal of several improvements originally identified in 1992 because they were deemed unnecessary. This resulted in a significant reduction of fees as can be seen in Table 3.12 (2009 vs. 2010). Hence between 2010 and 2015, the rate at which fees were imposed was lower than the pre-2010 years.
- Subsequent to the adoption of the Vision Plan, large sums of payouts were made to the Cities of Newport Beach ($3.65 million) and Tustin ($4.5 million), per the agreements between the Cities and City of Irvine (see Section 2.1 and Section 2.2).
- In addition, a sizeable amount of IBC Traffic Fee funds ($27.4 million – see Table 2.2) are allocated to implement CIP projects identified in the Vision Plan Traffic Study (improvements at the intersections of Jamboree Road at Main Street, Jamboree Road at Barranca Parkway, and the pedestrian bridge at the intersection of Jamboree Road at Michelson Drive). Lower collection rates and a higher allocation of funds to the CIP projects have led to a significantly smaller amount ($19.5 million) of remaining available Vision Plan Traffic Fee Program funds rolled over in this update as compared to 2010. Although the updated fee is higher than 2010, it still remains about 31%-35% lower than what was being charged in 2009.

4 Establishing Nexus

Section 1, Introduction discussed the requirement for a fair-share nexus between the mitigation requirements of the EIR and the traffic fees associated with the necessary mitigation improvements. The introduction further indicated a requirement to substantiate this nexus based on the adopted State legislation to ensure that fees collected are associated with development impacts and the physical improvements. The following statements fulfill the nexus requirements.

4.1 Identify the Purpose of the Impact Fee

The purpose of the 2015 IBC Traffic Fee Nexus Update is to:

- Clearly identify a fee rate to mitigate project related impacts within the IBC study area to an acceptable level of service.
- Mitigate the traffic impacts of new development within the IBC Vision Plan area under the expected buildout commensurate with the EIR Traffic Impact Mitigation Measures under CEQA and other agreements through which a fair-share of improvement costs have been contractually identified in an arms length negotiation.

The 2015 IBC Traffic Study Update evaluated the circulation system of the IBC study area under With and Without Project conditions. The study accounted for approved and pending projects within the IBC study area and forecast regional growth in both interim-year 2020 and Post-2035 buildout conditions. The Without Project conditions for each scenario assumed existing 2015 on-the ground development. The With Project conditions for each scenario included expected development within the IBC area, including the addition of residential DUs through the conversion of non-residential office equivalency square footage as identified in the traffic study.

Utilizing the intersection capacity utilization (ICU) analysis that measures peak hour intersection capacity and performance to assess impacts, the 2015 IBC Traffic Study Update identified project impacts at locations within and outside the City of Irvine, based on the City's TIA guidelines (2004) and those set by each of the affected jurisdiction/agencies (Caltrans and the cities of Newport Beach, Tustin, Santa Ana, Costa Mesa). For details on project- related thresholds, refer to the 2015 IBC Traffic Study Update[8]. As the traffic impacts are the responsibility of the project under CEQA, it is the responsibility of the project to mitigate the project impacts or contribute its fair-share towards each improvement. Thus, the Vision Plan is responsible for mitigating all the project traffic impacts to an acceptable level of service or to existing conditions performance levels. All future development under the Vision Plan will contribute to future circulation system impacts identified in the traffic study and will pay for the necessary improvements to deliver an acceptable level of service.

4.2 Identify the Use of the Impact Fee

The use of the proposed fee is the following:

- To fund the Vision Plan circulation improvements within the City of Irvine.
- To fund improvements to the State Highway System that will contribute to enhanced operations.
- To compensate adjacent jurisdictions for traffic impacts as a result of implementation of the Vision Plan.

The traffic fee will be used to mitigate traffic impacts from the buildout of the Vision Plan both within Irvine and in neighboring jurisdictions/agencies. The fee will be used to pay for improvements that accommodate residential

[8] *Irvine Business Complex Vision Plan – 2015 Five-Year Traffic Study Update, Iteris, HDR, 2016*

intensity increases within the IBC. Without the improvements, the project impacts would not be mitigated as necessary.

4.3 Determine Reasonableness Relationships

As discussed in Section 1.2, Purpose of the 2015 Update to the Vision Plan Nexus Study, California's Mitigation Fee Act creates the legal framework for local governments to assess new fees toward future development to pay its fair-share of the infrastructure cost necessary to serve new residents and businesses. AB 1600 stipulates that a local government must establish a "nexus" or reasonable relationship between a proposed fee and the impacts attributable to the developments paying the fee:

4.3.1 Reasonableness Between Use of Fee and the Type of Development on which the Fee is imposed

- IBC fees will be applied directly to the funding needs for each identified improvement within the City of Irvine and towards any pending financial obligation determined through existing agreements with adjacent jurisdictions regarding Vision Plan traffic impacts.
- IBC fees are collected from new development within the IBC that directly increases traffic on IBC study area roadways and impacts the circulation system component identified in the 2015 IBC Traffic Study Update.
- The 2015 IBC Traffic Study Update identifies the additional traffic volumes generated by new IBC development.
- Project-related fair-shares developed as part of the 2015 IBC Traffic Fee Nexus Update document the proportional responsibility of the project to traffic impact funding requirements.

The fees will be used to construct the improvements that will enable the circulation system to function at acceptable levels of service in Irvine and in adjacent jurisdictions.

4.3.2 Reasonableness Between Need for the Improvements and the Type of Development on which Fee is imposed

- As the IBC continues to develop, increasing traffic will necessitate improvements throughout the study area to maintain efficient circulation.
- Without implementation of project-related improvements, the circulation system will continue to deteriorate as new development compounds traffic operations deficiencies on the roadway network.

The fee collected is based on the forecasted number of trips the proposed development will generate at buildout. The need for the improvements is based on the analysis presented in the 2015 IBC Traffic Study Update. The fee is associated directly with new development within the IBC and the number of total peak hour trips that the new development is expected to generate. As the Vision Plan area develops, fees will be collected and improvements constructed to keep pace with new development, providing a circulation system throughout the IBC that operates at an acceptable level of service.

4.3.3 Reasonableness Between Amount of the Fee and Cost of Public Good (IBC Transportation Needs) attributable to the Type of Development

- Development fees have been defined based on funding of the City of Irvine's fair-share responsibility of the Vision Plan improvements outside the City within the Vision Plan study area, and 90% of the City of Irvine's responsibility for improvements within the City of Irvine. It is assumed that outside funding sources, including federal, state and county grants, can supplement the remaining 10% of development fees to implement improvements within the City of Irvine.

- The fee is supported by all new development at a rate that reflects the relative traffic impact of that development.
- The amount of the fee is directly related to the level of development associated with each new IBC project. The calculation of the impact fee is based upon the recognition that differing types of developments generate differing amounts of trips. The fee is based on the forecasted number of peak trips generated by the proposed development projects.

The total fee includes a program administration fee. This administration fee is required to ensure that the program functions properly and the traffic improvements are implemented appropriately.

To further demonstrate reasonableness of the fees, the updated IBC Transportation fees were compared with another major activity center in Orange County, the Platinum Triangle in Anaheim, California. Table 4.1 compares traffic fees imposed on developments within the Platinum Triangle with those proposed for IBC, in this update.

Table 4.1: Traffic Fee Comparison between Platinum Triangle and IBC

Land Use	Unit	Anaheim Citywide Fee *	Platinum Triangle Supplemental Fee *	Platinum Triangle Total Fee	IBC Updated Traffic Fee **
Residential	DU	$2,029	$3,702	$5,731	$4,697
Extended Stay	Room				$3,796
Hotel	Room	$1,474		$1,474	$6,140
Retail Mix	Sq. Ft.	$5.50	$50.00	$55.50	$13.97
Office	Sq. Ft.	$3.67	$12.00	$15.67	$13.97
Industrial Mix **	Sq. Ft.	$1.42	$3.00	$4.42	$3.79
Mini-Warehouse	Sq. Ft.				$2.44

Source: HDR 2015, City of Anaheim
* City of Anaheim Fee Schedule (http://www.anaheim.net/DocumentCenter/View/202)
** Effective FY 2017-2018

5 Conclusion

This 2015 IBC Traffic Fee Nexus Update has been prepared to reiterate the "nexus" for the development fees needed to fund necessary improvements to the circulation system. The updated traffic fee rates will be effective in the upcoming FY 2017-18. As noted in the Vision Plan EIR, there are overriding considerations for jurisdictional circulation system improvements outside the City of Irvine. As these improvements are not under the City of Irvine's jurisdiction, the City cannot guarantee that these improvements are implemented. However, it is the responsibility to contribute fair-share to the improvements through traffic impact fees in order to fund the improvements within these adjacent jurisdictions. During the development of the IBC Vision Plan, the City reached agreements with Newport Beach, Tustin and Caltrans, and amended an existing agreement with Santa Ana regarding its financial responsibilities to mitigate traffic impacts in each jurisdiction due to the buildout of the Vision Plan.

Since 2010, through the agreements with the Cities of Newport Beach and Tustin, the City of Irvine paid Tustin and Newport Beach a combined amount of $8.15 million as its fair-share, and thereby, has been absolved from any future fair-share contribution provided the City does not exceed its maximum cap on residential units of 15,000 base dwelling units (plus 1,794 density bonus dwelling units pursuant to state law.) For Caltrans, the City of Irvine is obligated to provide, through IBC fee collection, a total amount of $7,025,962, when the agency proceeds with the implementation of improvements at its impacted facilities. Currently the IBC fund has earmarked $440,663 towards that payment. Based on the amended agreement with Santa Ana, the City of Irvine is obligated to contribute $52,670,912 towards three improvements in Santa Ana (widening of Dyer Road, Alton Parkway Overcrossing at SR-55, and Flower Street at Segerstrom Avenue).The agreement with Costa Mesa was not revised and the City of Irvine, through the proposed fee, will collect an amount of $28,970 to contribute towards the improvement at SR-55 Frontage Road SB Ramps at Paularino Avenue.

Based on this update, the proposed fees are significantly higher than the current 2016 fees due to several factors which include additional improvement locations, significant increases in improvement costs between 2010 and 2015, fewer number of remaining developments that will share the cost of the improvements and a lesser amount of remaining available IBC funds that can be applied towards the improvements. However, even with the increased fees, they remain about 30%-35% lower than the 2009 IBC traffic fees, in-place prior to the adoption of the Vision Plan in 2010.

Appendix A: 2009 Settlement Agreement between City of Irvine and City of Newport Beach

SETTLEMENT AGREEMENT AND MUTUAL RELEASE OF CLAIMS

This Settlement Agreement and Mutual Release of Claims ("Agreement and Release") is made and entered into as of November 24, 2009 (the "Effective Date") by and between the CITY OF NEWPORT BEACH ("Newport Beach"), a California municipal corporation, and the CITY OF IRVINE ("Irvine"), a California municipal corporation. Newport Beach and Irvine are sometimes referred to in this Agreement and Release individually as a "Party" and collectively as the "Parties."

Recitals

A. Newport Beach is a petitioner and plaintiff in the below-described legal actions commenced and pending against Irvine, which are sometimes referred to collectively as the "Actions."

1. On April 26, 2007, Newport Beach and the City of Tustin ("Tustin") filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and West Millennium Homes)*, bearing Case No. 07CC01264. This action challenges Irvine's approval of the 82-unit Martin Street condominium project, situated within the Irvine Business Complex ("IBC"), and Irvine's certification of an environmental impact report in connection with the project approval. The trial court entered judgment in favor of Newport Beach and Tustin and against Irvine, and subsequently awarded attorneys' fees in favor of Newport Beach and Tustin and against Irvine. Irvine has appealed the judgment and the award of attorneys' fees (Court of Appeal Case Nos. G040749 and G041113).

2. On April 26, 2007, Newport Beach and Tustin filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures, Avalonbay Communities, Inc. and Alton Associates)*, bearing Case No. 07CC01265. This action challenges Irvine's approval of the 170-unit 2851 Alton condominium project, situated within the IBC, and Irvine's certification of an environmental impact report in connection with the project approval. The trial court entered judgment in favor of Newport Beach and Tustin and against Irvine, and subsequently awarded attorneys' fees in favor of Newport Beach and Tustin and against Irvine. Irvine has appealed the judgment and the award of attorneys' fees (Court of Appeal Case Nos. G040757 and G041107). Real party in interest Alton Associates has also appealed the judgment (Court of Appeal Case No. G040759) ("Alton Associates Appeal").

3. On December 12, 2008, Newport Beach and Tustin filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and Hines)*, bearing Case No. 30-2008-00228855-CU-WM-CXC. This action challenges Irvine's approval of a multi-phase project consisting of up to 785,000 square feet of office space and 15,500 square feet of retail/restaurant space, situated within the IBC, and Irvine's certification of an environmental impact report in connection with the project approval. This action is still pending in the Superior Court and no final disposition has occurred.

4. On April 29, 2009, Newport Beach and Tustin filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al.*, bearing Case No. 30-2009-00264696-CU-WM-CXC. This action challenges Irvine's approval of a Zoning Code Technical Update, including a new Accessory Retail Business designation as a permitted use within the IBC, and Irvine's determination that the approval was exempt from review under the California Environmental Quality Act ("CEQA"), codified as Public Resources Code section 21000 *et seq*. This action is still pending in the Superior Court and no final disposition has occurred.

B. The Parties mutually desire to enter into this Agreement and Release to achieve a full and complete resolution of all claims arising from or relating to the disputes between them concerning the Actions and the subject matters raised and implicated by the Actions.

NOW, THEREFORE, in consideration of the facts recited above, and the covenants, conditions and promises set forth below, the Parties agree as follows:

Agreement and Release

1. **Recitals Incorporated.** The Foregoing Recitals are incorporated herein and made a part of this Agreement and Release.

2. **Dismissal of Trial Court Actions.** Within ten (10) business days of the Effective Date of this Agreement and Release, Newport Beach shall personally deliver to Irvine's counsel properly completed and executed Requests for Dismissal with prejudice of the entire action as to Newport Beach only for the Actions entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and Hines)*, bearing Case No. 30-2008-00228855-CU-WM-CXC, and *City of Newport Beach and City of Tustin v. City of Irvine, et al.*, bearing Case No. 30-2009-00264696-CU-WM-CXC, as further described in paragraphs A.3 and A.4 above.

3. **Dismissal of Court of Appeal Actions.**

A. Irvine Appeals. Within five (5) business days of the Effective Date of this Agreement and Release, Newport Beach and Irvine shall file a Stipulated Request for Dismissal of the appeals as to Newport Beach only for the Actions entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and West Millennium Homes)* and *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures, Avalonbay Communities, Inc. and Alton Associates)*, as further described in paragraphs A.1 and A.2 above. Each Stipulated Request for Dismissal shall provide that upon remand of such portion of the Action to the Superior Court following issuance of a remittitur, Newport Beach and Irvine will file a stipulation for the vacation of the judgments and orders that are the subject of the appeal and for the dismissal with prejudice of the entire action as to Newport Beach only. Such stipulation shall also include an agreement that Newport Beach and Irvine shall each bear its own attorneys' fees and costs, and that for purposes of Newport Beach's attorneys' fees and costs, such amount would be fifty percent (50%) of the total amount of fees and costs, whether or not awarded, incurred by Newport Beach and Tustin jointly up to the date of the entry of dismissal.

B. Alton Associates Appeal. If Alton Associates agrees, within five (5) business days of the Effective Date of this Agreement and Release, or as soon thereafter as reasonably practicable, Newport Beach, Alton Associates and Irvine shall file a Stipulated Request for Dismissal of the appeal as to Newport Beach only for the Alton Associates Appeal. The Stipulated Request for Dismissal shall provide that upon remand of such portion of the Alton Associates Appeal to the Superior Court following issuance of a remittitur, Newport Beach, Alton Associates and Irvine will file a stipulation for the vacation of the judgment and orders that are the subject of the Alton Associates Appeal and for the dismissal with prejudice of the entire action as to Newport Beach only. Alton Associates must agree to bear its own attorneys' fees and costs in the action and the appeal. This Agreement and Release is conditioned upon the agreement of Alton Associates to take the action reflected in this paragraph. If Alton Associates does not agree to take this action, this Agreement and Release is void and without force or effect.

C. Forbearance. In addition to the obligations set forth above in this paragraph, Newport Beach shall not take or cause to be taken any actions to enforce or facilitate the enforcement of the judgments and orders issued in any of the Actions.

4. **Agreement Not To Bring Further Challenges; Agreement to Cooperate.** The Parties, and each of them, shall not initiate, join, participate in, provide funding to or assist any third party in the initiation or participation in, any legal or administrative action or proceeding challenging any of the following:

A. The approval of land use and development entitlements (including but not limited to tentative and final subdivision maps, conditional use permits, lot line adjustments, and grading and building plans and permits) for any development project in the other Party's city, so long as the project substantially conforms to the other Party's applicable General Plan, inclusive of any current formally submitted proposed amendments to Newport Beach's General Plan and the currently forecast development in Irvine's draft IBC Vision Plan. While not restricting Irvine's discretion to adopt a final IBC Vision Plan, the agreement by Newport Beach to not challenge the IBC Vision Plan as set out on this paragraph 4 is conditioned upon Irvine's adoption of the IBC Vision Plan alternative that provides for no greater than 15,000 residential dwelling units, excluding those units allowed as a matter of state law mandates (e.g., density bonus requirements), within the IBC.

B. The final approval of Irvine's IBC Vision Plan (including but not limited to the substance, merits, nature, scope, methodology, assumptions, analyses or conclusions) so long as such final plan substantially conforms to Irvine's draft IBC Vision Plan. In this regard, the Parties acknowledge and agree that the draft IBC Vision Plan may be modified as necessary to reflect the land use changes generally described in Exhibit A to that certain Settlement Agreement and Mutual Release between Allergan, Inc. and Irvine and the City Council of the City of Irvine, dated on or about August 18, 2009 ("Allergan Settlement Agreement"), a copy of which is appended as Exhibit "1" to this Agreement and Release and is hereby incorporated by this reference, and further acknowledge and agree that such land use changes are generally consistent with Irvine's draft IBC Vision Plan. While not restricting Irvine's discretion to adopt a final IBC Vision Plan, the agreement by Newport Beach to not challenge the IBC Vision Plan

as set out on this paragraph 4 is conditioned upon Irvine's modification of the IBC Vision Plan in a manner consistent with the Allegan Settlement Agreement.

C. The final approval of any current formally submitted proposed amendments to Newport Beach's General Plan and further including a technical modification of the Newport Beach General Plan for development in the Airport Business District to allow for the park in the Conexant project to be bounded on two sides by a public road.

D. Adjustments to the IBC Transportation Development Fee Program, provided that such adjustments are not in conflict or inconsistent with the provisions of or any obligations under this Agreement and Release.

E. Approval or implementation of any transit and/or transportation improvements supporting development activities in the IBC substantially conforming to the IBC Vision Plan.

F. Any determination under CEQA with respect to any of the foregoing.

The Parties, and each of them, further agree to cooperate in timely seeking and providing comments, both verbal and in writing, to each other on any proposed changes in their respective planning documents prior to any such change being presented to the respective decision-making body.

5. **Payment of Traffic/Transportation Impact Mitigation Fees.** Within twenty (20) business days of the Effective Date of this Agreement and Release, Irvine shall pay Newport Beach, and Newport Beach agrees to accept and expend, the sum of Three Million Six Hundred Fifty Thousand Dollars ($3,650,000.00) to be used exclusively for the engineering, design and appropriately-timed construction of traffic and transportation improvements situated within the City of Newport Beach portion of the Traffic Study Area that was utilized in the previously circulated Draft Environmental Impact Report for the IBC Vision Plan ("Traffic Study Area"), such expenditures to be as deemed appropriate by Newport Beach in its sole discretion to improve traffic conditions in the Traffic Study Area as necessitated by development in the IBC. A map depicting and describing the Traffic Study Area is appended as Exhibit "2" to this Agreement and Release and is hereby incorporated by this reference. The Parties acknowledge and agree that Irvine's contribution of the sum set forth above shall and does constitute Irvine's fair share obligation toward traffic and transportation improvements within the City of Newport Beach arising from or related to development in the IBC contemplated by and in substantial conformance to the IBC Vision Plan so long as Irvine adopts the alternative that provides for no greater than 15,000 residential dwelling units, excluding those units allowed as a matter of state law mandates (e.g., density bonus requirements), within the IBC. The Parties further acknowledge and agree that Irvine's contribution of the sum set forth above shall and does fully discharge Irvine's obligation to pay a fair share toward all traffic and transportation improvements situated within the City of Newport Beach necessitated by any past project approvals and future project approvals contemplated by and in substantial conformance to the IBC Vision Plan so long as Irvine adopts the alternative that provides for no greater than 15,000 residential dwelling units, excluding those units allowed as a matter of state law mandates (e.g.,

density bonus requirements) within the IBC, and so long the IBC Vision Plan is modified to be consistent with the Allergan Settlement Agreement.

6. **Irvine Support of Newport Beach Park.** Irvine will support the efforts of Newport Beach to obtain and improve a park site on property currently owned by the University of California, Irvine as more specifically described in Exhibit "3" appended hereto and hereby incorporated by this reference. Newport Beach acknowledges and agrees that absent a further agreement to the contrary, Irvine shall have no financial or programmatic responsibility for any such park. Newport Beach, in its sole discretion and upon such terms and conditions as it deems appropriate or necessary, may hereafter consider entering into a joint use agreement with Irvine for any such park. Newport Beach does not and shall not have any obligation to enter into a joint use agreement with Irvine for any such park.

7. **Release of Claims.**

A. Each Party, including its mayors, councilmembers, officers, employees, agents, assigns and attorneys, hereby releases and forever discharges the other Party, including its mayors, councilmembers, officers, employees, agents, assigns and attorneys, from any and all claims, demands, causes of action, obligations, damages, injuries, attorneys' fees, costs, and liabilities of any nature whatsoever, whether or not now known, suspected or claimed, which the Party ever had, now has or may claim to have against the other Party (whether directly or indirectly), by reason of any act or omission concerning any matter, event, incident, encounter, cause, or thing relating to or arising out of the events that underlie and are the subject of the Actions, and any claims asserted or which could be or could have been asserted in the Actions.

B. Each Party acknowledges that it may later discover facts different from or in addition to those it now knows or believes to be true with respect to the claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are the subject of the releases set forth in this Agreement and Release. The Parties expressly agree to assume the risk of the possible discovery of additional or different facts, and agree that this Agreement and Release shall be and remain effective in all respects regardless of such additional or different facts.

C. The releases set forth above are general releases of all claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are described in those releases and are intended to encompass all known and unknown, foreseen and unforeseen claims which Newport Beach and Irvine may have against each other relating to or arising out of the events that underlie and are the subject of the Actions, except for any claims that may arise from the terms of this Agreement and Release.

D. By releasing and forever discharging claims both known and unknown as hereinabove provided, the Parties, and each of them, expressly waive and relinquish all rights and benefits they may have under section 1542 of the Civil Code of the State of California, which reads as follows:

> "[General Release -- Claims Extinguished.] A general release does not extend to claims which the creditor does not know or suspect to

exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

E. It is agreed and understood that these releases do not affect the rights or actions available to the City of Tustin, if there are any, to pursue its pending actions or future actions. It is further agreed and understood that Agreement and Release is not intended, nor is it to be construed, to expand the rights of Tustin with regard to the collection of attorneys' fees and costs that have previously been awarded in the Actions in favor of Tustin and any further attorneys' fees and costs incurred but not yet awarded.

8. **Responsibility for Attorneys' Fees, Costs and Litigation Expenses.** Newport Beach and Irvine each shall be wholly responsible for the payment of their respective attorneys' fees, cost and litigation expenses incurred in the Actions.

9. **No Other Pending Actions.** The Parties each warrant and represent that they have not filed any complaints or claims (other than the Actions referenced above) against each other with any local, state or federal agency or court, and that they will not do so at any time hereafter with respect to the event that underlie and are the subject of the Actions, the claims that were asserted or that could be or could have been asserted in the Actions, or any claims arising out of the Actions.

10. **No Assignment of Claims.** The Parties each warrant and represent that they have made no assignment, and will make no assignment, of any claim, cause of action, right of action or any right of any kind whatsoever, embodied in any of the claims and allegations referred to herein, and that no other person or entity of any kind had or has any interest in any of the demands, obligations, actions, causes of action, debts liabilities, rights, contracts, damages, attorneys' fees, costs, expenses, losses or claims referred to herein. Each Party hereby agrees to indemnify, defend and hold harmless the other Party as against any claim based on or arising out of any assignment, transfer or sale in violation of the foregoing warranty.

11. **Non-Admission of Liability.** The Parties acknowledge and agree that this Agreement and Release is a settlement of disputed claims. Neither the fact that the Parties have settled nor the terms of this Agreement and Release shall be construed in any manner as an admission of any liability by Irvine or any affiliated person or entity, all of whom consistently have taken the position that they have no liability whatsoever to Newport Beach.

12. **Successors and Assigns.** This Agreement and Release, and all of the terms and provisions hereof, shall be binding upon and shall inure to the benefit of the Parties and their respective successors, assigns and legal representatives.

13. **Knowing and Voluntary.** The Parties each specifically represent that prior to signing this Agreement and Release, they have been provided a reasonable period of time within which to consider whether to accept this Agreement and Release. The Parties each represent that they have each carefully read and fully understand all of the provisions of this Agreement, and that they are voluntarily, knowingly, and without coercion entering into this Agreement and Release based upon their own judgment.

14. **Assistance of Counsel.** The Parties each specifically represent that they have consulted to their satisfaction with and received independent advice from their respective counsel prior to executing this Agreement and Release concerning the terms and conditions of this Agreement and Release.

15. **Enforcement Costs.** Should any legal action be required to enforce the terms of this Agreement and Release, the prevailing Party shall be entitled to reasonable attorneys' fees and costs in addition to any other relief to which that Party may be entitled.

16. **Severability.** Should any portion, word, clause, phrase, sentence or paragraph of this Agreement and Release be declared void or unenforceable, such portion shall be considered independent and severable from the remainder, the validity of which shall remain unaffected.

17. **Construction.** The Parties acknowledge that this Agreement and Release was jointly prepared by them, by and through their respective legal counsel, and any uncertainty or ambiguity existing herein shall not be interpreted against any of the Parties, but otherwise shall be interpreted according to the application of the rules on interpretation of contracts.

18. **Waiver.** Failure to insist on compliance with any term, covenant or condition contained in this Agreement and Release shall not be deemed a waiver of that term, covenant or condition, nor shall any waiver or relinquishment of any right or power contained in this Agreement and Release at any one time or more times be deemed a waiver or relinquishment of any right or power at any other time or times.

19. **Governing Law and Venue.** This Agreement and Release is made and entered into in the State of California, and shall in all respects be interpreted, enforced and governed under the laws of said State without giving effect to conflicts of laws principles. Venue for any action to enforce this Agreement and Release shall be in the Orange County Superior Court, notwithstanding the provisions of Code of Civil Procedure section 394.

20. **Notices.** All notices and other communications provided or permitted hereunder shall be made personal delivery or pre-paid first class mail, as follows:

If to Newport Beach:
City of Newport Beach
Attention: City Manager
3300 Newport Boulevard
Post Office Box 1768
Newport Beach, CA 92658-8915

with a copy to:
City of Newport Beach
Office of the City Attorney
3300 Newport Boulevard
Post Office Box 1768
Newport Beach, CA 92658-8915

If to Irvine: City of Irvine
Attention: City Manager
One Civic Center Plaza
Post Office Box 19575
Irvine, CA 92623-9575

With a copy to: Rutan & Tucker, LLP
Attention: City Attorney, City of Irvine
611 Anton Boulevard, Suite 1400
Costa Mesa, CA 92626

All such notices and communications shall be deemed to have been given when delivered, if personally delivered; and two business days after being deposited in the United States mail, postage prepaid.

21. **Entire Agreement.** This Agreement and Release constitutes the entire agreement between the Parties who have executed it and supersedes any and all other agreements, understandings, negotiations, or discussions, either oral or in writing, express or implied, between the Parties to this Agreement and Release. The Parties to this Agreement and Release each acknowledge that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by them, or anyone acting on their behalf, which are not embodied in this Agreement and Release, that they have not executed this Agreement and Release in reliance on any such representation, inducement, promise, agreement or warranty, and that no representation, inducement, promise, agreement or warranty not contained in this Agreement and Release including, but not limited to, any purported supplements, modifications, waivers or terminations of this Agreement and Release shall be valid or binding, unless executed in writing by all of the Parties to this Agreement and Release.

22. **Further Assurances; Mutual Cooperation.** The Parties shall perform such further acts, including execution of documents, as are necessary to effectuate the intent of this Agreement and Release. The Parties shall cooperate to ensure that the steps necessary to implement this Agreement and Release are carried out.

23. **No Third Party Beneficiaries.** The Parties recognize and agree that the real parties in interest in the Actions will receive benefits incidental to this Agreement and Release, including but not limited to the vacation of Superior Court orders concerning the issuance of land use entitlement approvals and the award of attorneys' fees. The Parties intend and agree that no third parties, including such real parties in interest, shall have any rights to enforce any provision of or any obligation created by this Agreement and Release.

24. **Representation of Authority to Execute.** Each of the persons executing this Agreement and Release represents and warrants that he or she is duly and fully authorized and empowered to execute this Agreement and Release on behalf of and to bind the Party so indicated below.

IN WITNESS WHEREOF, the undersigned have executed this Settlement Agreement and Mutual Release of Claims on the dates set forth below.

CITY OF NEWPORT BEACH

By: _____

Edward D. Selich, Mayor

Dated: November 24, 2009

Attest: _____

Leilani I. Brown, City Clerk

APPROVED AS TO FORM:

By: _____

David R. Hunt
City Attorney, City of Newport Beach

CITY OF IRVINE

By: _____

Sukhee Kang, Mayor

Dated: November 24, 2009

Attest: _____

Sharie Apodaca, City Clerk

By: _____

Philip D. Kohn
City Attorney, City of Irvine

Appendix B: 2010 Settlement Agreement between City of Irvine and City of Tustin

SETTLEMENT AGREEMENT AND MUTUAL RELEASE OF CLAIMS

This Settlement Agreement and Mutual Release of Claims ("Agreement and Release") is made and entered into as of July 13, 2010 (the "Effective Date") by and between the CITY OF TUSTIN ("Newport Beach"), a California municipal corporation, and the CITY OF IRVINE ("Irvine"), a California municipal corporation. Tustin and Irvine are sometimes referred to in this Agreement and Release individually as a "Party" and collectively as the "Parties."

Recitals

A. Tustin is a petitioner and plaintiff in the below-described legal actions commenced and pending against Irvine, which are sometimes referred to collectively as the "Actions."

1. On April 26, 2007, Tustin and the City of Newport Beach "Newport Beach") filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and West Millennium Homes)*, bearing Case No. 07CC01264. This action challenges Irvine's approval of the 82-unit Martin Street condominium project, situated within the Irvine Business Complex ("IBC"), and Irvine's certification of an environmental impact report in connection with the project approval. The trial court entered judgment in favor of Tustin and Newport Beach and against Irvine, and subsequently awarded attorneys' fees in favor of Tustin and Newport Beach and against Irvine. Irvine has appealed the judgment and the award of attorneys' fees (Court of Appeal Case Nos. G040749 and G041113).

2. On April 26, 2007, Tustin and Newport Beach filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures, Avalonbay Communities, Inc. and Alton Associates)*, bearing Case No. 07CC01265. This action challenges Irvine's approval of the 170-unit 2851 Alton condominium project, situated within the IBC, and Irvine's certification of an environmental impact report in connection with the project approval. The trial court entered judgment in favor of Tustin and Newport Beach and against Irvine, and subsequently awarded attorneys' fees in favor of Tustin and Newport Beach and against Irvine. Irvine has appealed the judgment and the award of attorneys' fees (Court of Appeal Case Nos. G040757 and G041107). Real party in interest Alton Associates has also appealed the judgment (Court of Appeal Case No. G040759) ("Alton Associates Appeal").

3. On December 12, 2008, Tustin and Newport Beach filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and Hines)*, bearing Case No. 30-2008-00228855-CU-WM-CXC. This action challenges Irvine's approval of a multi-phase project consisting of up to 785,000 square feet of office space and 15,500 square feet of retail/restaurant space, situated within the IBC, and Irvine's certification of an environmental impact report in connection with the project approval. This action is still pending in the Superior Court and no final disposition has occurred.

4. On April 29, 2009, Tustin and Newport Beach filed an action in the Orange County Superior Court entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al.*, bearing Case No. 30-2009-00264696-CU-WM-CXC. This action challenges Irvine's approval of a Zoning Code Technical Update, including a new Accessory Retail Business designation as a permitted use within the IBC, and Irvine's determination that the approval was exempt from review under the California Environmental Quality Act ("CEQA"), codified as Public Resources Code section 21000 *et seq*. This action is still pending in the Superior Court and no final disposition has occurred.

B. The Parties mutually desire to enter into this Agreement and Release to achieve a full and complete resolution of all claims arising from or relating to the disputes between them concerning the Actions and the subject matters raised and implicated by the Actions.

NOW, THEREFORE, in consideration of the facts recited above, and the covenants, conditions and promises set forth below, the Parties agree as follows:

Agreement and Release

1. **Reeitals Iueorporated.** The Foregoing Recitals are incorporated herein and made a part of this Agreement and Release.

2. **Dismissal of Trial Court Aetious.** Within ten (10) business days of the Effective Date of this Agreement and Release, Tustin shall personally deliver to Irvine's counsel properly completed and executed Requests for Dismissal with prejudice of the entire action as to Tustin only for the Actions entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and Hines)*, bearing Case No. 30-2008-00228855-CU-WM-CXC, and *City of Newport Beach and City of Tustin v. City of Irvine, et al.*, bearing Case No. 30-2009-00264696-CU-WM-CXC, as further described in paragraphs A.3 and A.4 above. The Parties acknowledge that Newport Beach previously filed Requests for Dismissal of the subject actions as to Newport Beach only, which dismissals were entered, and that the dismissals as to Tustin will result in dismissal of the subject actions in their entirety.

3. **Dismissal of Court of Appeal Aetious.**

A. Irvine Appeals. Within five (5) business days of the Effective Date of this Agreement and Release, Tustin and Irvine shall file a Stipulated Request for Dismissal of the appeals as to Tustin only for the Actions entitled *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures and West Millennium Homes)* and *City of Newport Beach and City of Tustin v. City of Irvine, et al. (Starpointe Ventures, Avalonbay Communities, Inc. and Alton Associates)*, as further described in paragraphs A.1 and A.2 above. Each Stipulated Request for Dismissal shall provide that upon remand of such portion of the Action to the Superior Court following issuance of a remittitur, Tustin and Irvine will file a stipulation for the vacation of the judgments and orders that are the subject of the appeal and for the dismissal with prejudice of the entire action as to Tustin only. Such stipulation shall also include an agreement that Tustin and Irvine shall each bear its own attorneys' fees and costs. The Parties acknowledge that Newport Beach and Irvine previously filed such a Stipulated Request for Dismissal of the appeals as to Newport Beach only and upon remittitur filed a stipulation for the

vacation of the judgments and orders that were the subject of the appeal and for the dismissal with prejudice of the entire action as to Newport Beach, which dismissals were entered, and that the dismissals as to Tustin contemplated by this paragraph 3.A will result in dismissal of the subject actions in their entirety.

B. Alton Associates Appeal. If Alton Associates agrees, within five (5) business days of the Effective Date of this Agreement and Release, or as soon thereafter as reasonably practicable, Tustin, Alton Associates and Irvine shall file a Stipulated Request for Dismissal of the appeal as to Tustin only for the Alton Associates Appeal. The Stipulated Request for Dismissal shall provide that upon remand of such portion of the Alton Associates Appeal to the Superior Court following issuance of a remittitur, Tustin, Alton Associates and Irvine will file a stipulation for the vacation of the judgment and orders that are the subject of the Alton Associates Appeal and for the dismissal with prejudice of the entire action as to Tustin only. Alton Associates must agree to bear its own attorneys' fees and costs in the action and the appeal. This Agreement and Release is conditioned upon the agreement of Alton Associates to take the action reflected in this paragraph. If Alton Associates does not agree to take this action, this Agreement and Release is void and without force or effect. The Parties acknowledge that Newport Beach, Alton Associates and Irvine previously filed such a Stipulated Request for Dismissal of the appeal as to Newport Beach only and upon remittitur filed a stipulation for the vacation of the judgment and orders that were the subject of the appeal and for the dismissal with prejudice of the entire action as to Newport Beach, which dismissal were entered, and that the dismissal as to Tustin contemplated by this paragraph 3.B will result in dismissal of the subject action in its entirety.

C. Forbearance. In addition to the obligations set forth above in this paragraph, Tustin shall not take or cause to be taken any actions to enforce or facilitate the enforcement of the judgments and orders issued in any of the Actions.

4. **Agreement Not To Bring Further Challenges; Agreement to Cooperate.** The Parties, and each of them, shall not initiate, join, participate in, provide funding to or assist any third party in the initiation or participation in, any legal or administrative action or proceeding challenging any of the following:

A. The approval of land use and development entitlements (including but not limited to tentative and final subdivision maps, conditional use permits, lot line adjustments, and grading and building plans, permits, community facilities district and/or assessment district proceedings, including any necessary subsequent environmental documentation for any and all implementation actions) for any development project in the other Party's city, so long as the project substantially conforms to the Average Daily Trip (ADTs) development maximum thresholds in each other Party's current respective General Plan, zoning documents and other applicable planning documents, inclusive of the MCAS Tustin Specific Plan (approved on or about February 3, 2003), any previously adopted amendments and any current formally submitted proposed amendments to Tustin's General Plan, or is exempt from environmental review under state law, and the currently forecast development in Irvine's draft IBC Vision Plan, and inclusive of ADTs for maximum development identified in the applicable planning documents. While not restricting Irvine's discretion to adopt a final IBC Vision Plan, the agreement by Tustin to not challenge the IBC Vision Plan as set out on this paragraph 4 is

conditioned upon Irvine's adoption of the IBC Vision Plan alternative as provided in Section 4.B below.

B. The final approval of Irvine's IBC Vision Plan (including but not limited to the substance, merits, nature, scope, methodology, assumptions, analyses or conclusions) so long as such final plan substantially conforms to Irvine's draft IBC Vision Plan. In this regard, the Parties acknowledge and agree that the draft IBC Vision Plan may be modified as necessary to reflect the land use changes generally described in Exhibit A to that certain Settlement Agreement and Mutual Release between Allergan, Inc. and Irvine and the City Council of the City of Irvine, dated on or about August 18, 2009 ("Allergan Settlement Agreement"), a copy of which is appended as Exhibit "1" to this Agreement and Release and is hereby incorporated by this reference, and further acknowledge and agree that such land use changes are generally consistent with Irvine's draft IBC Vision Plan. While not restricting Irvine's discretion to adopt a final IBC Vision Plan, the agreement by Tustin to not challenge the IBC Vision Plan as set out on this paragraph 4 is conditioned upon Irvine's modification of the IBC Vision Plan in a manner consistent with the Allegan Settlement Agreement.

C. The certified Final Environmental Information Statement/Environmental Impact Report for the Tustin Legacy project, including without limitation the incorporated Supplemental Environmental Information Statement/Environmental Impact report for the Tustin Ranch Road project and the Addendum for Zone Change (Specific Plan Amendment) 05-022 and the Master Developer Disposition and Development Agreement and Development Plan (approved on or about June 5, 2007), together with a possible Addendum to the Final EIS/EIR for the Tustin Legacy project for modification or deletion of transportation/circulation projects and mitigation measures (collectively, "the Final EIS/EIR for Tustin Legacy") in order to implement the terms of this Agreement.

D. Adjustments to the IBC Transportation Development Fee Program or the Tustin Legacy Backbone Infrastructure Program, provided that such adjustments are not in conflict or inconsistent with the provisions of or any obligations under this Agreement and Release.

E. Approval or implementation of any transit and/or transportation improvements supporting development activities in the IBC substantially conforming to the IBC Vision Plan or for the Tustin Legacy project.

F. Any determination under CEQA with respect to any of the foregoing.

The Parties, and each of them, further agree to cooperate in timely seeking and providing comments, both verbal and in writing, to each other on any proposed changes in their respective planning documents prior to any such change being presented to the respective decision-making body.

5. **Prior Agreement Regarding Red Hill Avenue Improvements.** On or about November 16, 1992, Tustin and Irvine entered into that certain Agreement Regarding Implementation, Timing and Funding of Transportation/Circulation Mitigation for the Irvine Business Complex Project ("1992 Agreement"). Tustin and Irvine agree that Irvine hereafter

shall not have, and shall be relieved of and discharged from, any responsibilities or obligations to perform under or pursuant to the 1992 Agreement, and that all of the terms and provisions of the 1992 Agreement shall be and are terminated in their entirety and of no further force or effect. The parties acknowledge and agree that the construction of the Red Hill Avenue Improvements as provided in the 1992 Agreement are unnecessary and not required by the IBC Vision Plan as a mitigation measure.

6. **Prior Agreement Regarding Tustin Legaey Mitigation Measures.** On or about February 22, 2001, Tustin and Irvine entered into that certain Agreement Between the City of Irvine and the City of Tustin Regarding the Implementation, Timing and Funding of Transportation/Circulation Mitigation for the MCAS Tustin Project ("2001 Agreement"). Tustin hereafter shall not have, and shall be relieved of and discharged from, any responsibilities or obligations to perform under or pursuant to the 2001 Agreement, and that all of the terms and provisions of the 2001 Agreement shall be and are terminated in their entirety and of no further force or effect, and no additional mitigation requirements are required within the City of Irvine under the Tustin adopted Final EIS/EIR for the Tustin Legacy project. In 2005, Tustin, Irvine and Lennar Homes of California, Inc. entered into a Joint Community Facilities Agreement as it related to the use by Tustin of net bond proceeds generated by Irvine Community Facilities District 2005-02 (Columbus Grove) for certain of the mitigation measures required in the 2001 Agreement ("2005 Agreement"). Tustin and Irvine agree that Irvine shall be entitled to accept and use the remaining estimated balance of $1.9 million in the Tustin Account (as defined in the 2005 Agreement) in such manner and for such purposes authorized under CFD 2005-02, as Irvine determines in its sole and absolute discretion.

7. **Payment for Tnstin Raneh Road Improvements.** In lieu of Irvine's fair share of the estimated costs of those traffic and transportation improvements located within Tustin identified as mitigation measures in and arising from the IBC Vision Plan, Irvine shall contribute 12% of the construction contract award amount or $4.5 million, whichever is greater, up to a maximum of $6.5 million, for the Tustin Ranch Road Extension roadway improvements from Walnut Avenue to Warner Avenue, including the grade separation and loop at Edinger Avenue. Irvine shall pay this sum to Tustin within twenty (20) business days of the date Tustin awards a construction contract for all segments of the project. In the event that Tustin has not awarded such a construction contract by July 1, 2015, Tustin may use Irvine's contribution to jointly fund such interim improvements for Tustin Ranch Road from Walnut Avenue to Warner Avenue as are mutually agreeable and beneficial to both cities. Irvine's contribution obligation will expire, and Tustin shall reimburse Irvine any contribution made, in the event that Tustin Ranch Road between Walnut Avenue and Warner Avenue is not fully constructed and open to traffic by July 1, 2025. The Parties acknowledge and agree that Irvine's agreement to contribute funds as set forth above shall and does constitute Irvine's fair share obligation toward traffic and transportation improvements within the City of Tustin arising from or related to development in the IBC contemplated by and in substantial conformance to the IBC Vision Plan. Further, Tustin and Irvine agree to cooperatively advocate any applications for regional, state, or federal funding for the Tustin Ranch Road Extension roadway improvements.

8. **Release of Claims.**

A. Each Party, including its mayors, councilmembers, officers, employees, agents, assigns and attorneys, hereby releases and forever discharges the other Party, including its mayors, councilmembers, officers, employees, agents, assigns and attorneys, from any and all claims, demands, causes of action, obligations, damages, injuries, attorneys' fees, costs, and liabilities of any nature whatsoever, whether or not now known, suspected or claimed, which the Party ever had, now has or may claim to have against the other Party (whether directly or indirectly), by reason of any act or omission concerning any matter, event, incident, encounter, cause, or thing relating to or arising out of the events that underlie and are the subject of the Actions, and any claims asserted or which could be or could have been asserted in the Actions.

B. Each Party acknowledges that it may later discover facts different from or in addition to those it now knows or believes to be true with respect to the claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are the subject of the releases set forth in this Agreement and Release. The Parties expressly agree to assume the risk of the possible discovery of additional or different facts, and agree that this Agreement and Release shall be and remain effective in all respects regardless of such additional or different facts.

C. The releases set forth above are general releases of all claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are described in those releases and are intended to encompass all known and unknown, foreseen and unforeseen claims that Tustin and Irvine may have against each other relating to or arising out of the events that underlie and are the subject of the Actions, except for any claims that may arise from the terms of this Agreement and Release.

D. By releasing and forever discharging claims both known and unknown as hereinabove provided, the Parties, and each of them, expressly waive and relinquish all rights and benefits they may have under section 1542 of the Civil Code of the State of California, which reads as follows:

> "[General Release -- Claims Extinguished.] A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

9. **Responsibility for Attorneys' Fees, Costs and Litigation Expenses.** Tustin and Irvine each shall be wholly responsible for the payment of their respective attorneys' fees, cost and litigation expenses incurred in the Actions.

10. **No Other Pending Aetions.** The Parties each warrant and represent that they have not filed any complaints or claims (other than the Actions referenced above) against each other with any local, state or federal agency or court, and that they will not do so at any time hereafter with respect to the event that underlie and are the subject of the Actions, the claims that

were asserted or that could be or could have been asserted in the Actions, or any claims arising out of the Actions.

11. **No Assignment of Claims.** The Parties each warrant and represent that they have made no assignment, and will make no assignment, of any claim, cause of action, right of action or any right of any kind whatsoever, embodied in any of the claims and allegations referred to herein, and that no other person or entity of any kind had or has any interest in any of the demands, obligations, actions, causes of action, debts liabilities, rights, contracts, damages, attorneys' fees, costs, expenses, losses or claims referred to herein. Each Party hereby agrees to indemnify, defend and hold harmless the other Party as against any claim based on or arising out of any assignment, transfer or sale in violation of the foregoing warranty.

12. **Non-Admission of Liability.** The Parties acknowledge and agree that this Agreement and Release is a settlement of disputed claims. Neither the fact that the Parties have settled nor the terms of this Agreement and Release shall be construed in any manner as an admission of any liability by Irvine or any affiliated person or entity, all of whom consistently have taken the position that they have no liability whatsoever to Newport Beach.

13. **Successors and Assigns.** This Agreement and Release, and all of the terms and provisions hereof, shall be binding upon and shall inure to the benefit of the Parties and their respective successors, assigns and legal representatives.

14. **Knowing and Voluntary.** The Parties each specifically represent that prior to signing this Agreement and Release, they have been provided a reasonable period of time within which to consider whether to accept this Agreement and Release. The Parties each represent that they have each carefully read and fully understand all of the provisions of this Agreement, and that they are voluntarily, knowingly, and without coercion entering into this Agreement and Release based upon their own judgment.

15. **Assistance of Counsel.** The Parties each specifically represent that they have consulted to their satisfaction with and received independent advicc from their respective counsel prior to executing this Agreement and Release concerning the terms and conditions of this Agreement and Release.

16. **Euforcemcnt Costs.** Should any legal action be required to enforce the terms of this Agreement and Release, the prevailing Party shall be entitled to reasonable attorneys' fees and costs in addition to any other relief to which that Party may be entitled.

17. **Severability.** Should any portion, word, clause, phrase, sentence or paragraph of this Agreement and Release be declared void or unenforceable, such portion shall be considered independent and severable from the remainder, the validity of which shall remain unaffected.

18. **Coustructiou.** The Parties acknowledge that this Agreement and Release was jointly prepared by them, by and through their respective legal counsel, and any uncertainty or ambiguity existing herein shall not be interpreted against any of the Parties, but otherwise shall be interpreted according to the application of the rules on interpretation of contracts.

19. **Waiver.** Failure to insist on compliance with any term, covenant or condition contained in this Agreement and Release shall not be deemed a waiver of that term, covenant or condition, nor shall any waiver or relinquishment of any right or power contained in this Agreement and Release at any one time or more times be deemed a waiver or relinquishment of any right or power at any other time or times.

20. **Governing Law and Venne.** This Agreement and Release is made and entered into in the State of California, and shall in all respects be interpreted, enforced and governed under the laws of said State without giving effect to conflicts of laws principles. Venue for any action to enforce this Agreement and Release shall be in the Orange County Superior Court, notwithstanding the provisions of Code of Civil Procedure section 394.

21. **Notiees.** All notices and other communications provided or permitted hereunder shall be made personal delivery or pre-paid first class mail, as follows:

If to Tustin:	City of Tustin Attention: City Manager 300 Centennial Way Tustin, CA 92780
with a copy to:	Woodruff, Spradlin & Smart Attention: City Attorney, City of Tustin 555 Anton Boulevard, Suite 1200 Costa Mesa, CA 92626
If to Irvine:	City of Irvine Attention: City Manager One Civic Center Plaza Post Office Box 19575 Irvine, CA 92623-9575
With a copy to:	Rutan & Tucker, LLP Attention: City Attorney, City of Irvine 611 Anton Boulevard, Suite 1400 Costa Mesa, CA 92626

All such notices and communications shall be deemed to have been given when delivered, if personally delivered; and two business days after being deposited in the United States mail, postage prepaid.

22. **Entire Agreement.** This Agreement and Release constitutes the entire agreement between the Parties who have executed it and supersedes any and all other agreements, understandings, negotiations, or discussions, either oral or in writing, express or implied, between the Parties to this Agreement and Release. The Parties to this Agreement and Release each acknowledge that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by them, or anyone acting on their behalf, which are not embodied in this Agreement and Release, that they have not executed this Agreement and Release in

reliance on any such representation, inducement, promise, agreement or warranty, and that no representation, inducement, promise, agreement or warranty not contained in this Agreement and Release including, but not limited to, any purported supplements, modifications, waivers or terminations of this Agreement and Release shall be valid or binding, unless executed in writing by all of the Parties to this Agreement and Release.

23. **Further Assuranees; Mutual Cooperation.** The Parties shall perform such further acts, including execution of documents, as are necessary to effectuate the intent of this Agreement and Release. The Parties shall cooperate to ensure that the steps necessary to implement this Agreement and Release are carried out.

24. **No Third Party Benefieiaries.** The Parties recognize and agree that the real parties in interest in the Actions will receive benefits incidental to this Agreement and Release, including but not lirnited to the vacation of Superior Court orders concerning the issuance of land use entitlement approvals and the award of attorneys' fees. The Parties intend and agree that no third parties, including such real parties in interest, shall have any rights to enforce any provision of or any obligation created by this Agreement and Release.

25. **Representation of Authority to Exeeute.** Each of the persons executing this Agreement and Release represents and warrants that he or she is duly and fully authorized and empowered to execute this Agreement and Release on behalf of and to bind the Party so indicated below.

IN WITNESS WHEREOF, the undersigned have executed this Settlement Agreement and Mutual Release of Claims on the dates set forth below.

CITY OF TUSTIN

By: _____

Jerry Amante, Mayor

Dated: July 12, 2010

Attest: _____

Pamela Stoker, City Clerk

APPROVED AS TO FORM:

By: _____

Douglas C. Holland
City Attorney, City of Tustin

CITY OF IRVINE

By: _____

Sukhee Kang, Mayor

Dated: July ___, 2010

Attest: _____

Sharie Apodaca, City Clerk

By: _____

Philip D. Kohn
City Attorney, City of Irvine

reliance on any such representation, inducement, promise, agreement or warranty, and that no representation, inducement, promise, agreement or warranty not contained in this Agreement and Release including, but not limited to, any purported supplements, modifications, waivers or terminations of this Agreement and Release shall be valid or binding, unless executed in writing by all of the Parties to this Agreement and Release.

23. **Further Assurances; Mutual Cooperation.** The Parties shall perform such further acts, including execution of documents, as are necessary to effectuate the intent of this Agreement and Release. The Parties shall cooperate to ensure that the steps necessary to implement this Agreement and Release are carried out.

24. **No Third Party Beneficiaries.** The Parties recognize and agree that the real parties in interest in the Actions will receive benefits incidental to this Agreement and Release, including but not limited to the vacation of Superior Court orders concerning the issuance of land use entitlement approvals and the award of attorneys' fees. The Parties intend and agree that no third parties, including such real parties in interest, shall have any rights to enforce any provision of or any obligation created by this Agreement and Release.

25. **Representation of Authority to Exeeute.** Each of the persons executing this Agreement and Release represents and warrants that he or she is duly and fully authorized and empowered to execute this Agreement and Release on behalf of and to bind the Party so indicated below.

IN WITNESS WHEREOF, the undersigned have executed this Settlement Agreement and Mutual Release of Claims on the dates set forth below.

CITY OF TUSTIN

By:_____

Jerry Amante, Mayor

Dated: July ___, 2010

Attest:_____

Pamela Stoker, City Clerk

APPROVED AS TO FORM:

By:_____

Douglas C. Holland
City Attorney, City of Tustin

CITY OF IRVINE

By:_____

Sukhee Kang, Mayor

Dated: July 12, 2010

Attest:_____

Sharie Apodaca, City Clerk

By:_____

Philip D. Kohn
City Attorney, City of Irvine

Appendix C: 1992 Agreement and Subsequent Amendment between City of Irvine and City of Santa Ana

AMENDMENT TO AND RESTATEMENT OF THE 1992 AGREEMENT BETWEEN THE CITIES OF SANTA ANA AND IRVINE

THIS AGREEMENT ("Agreement") entered into and shall be effective on this 21st day of MARCH, 2011 by and between the City of Santa Ana, hereinafter referred to as "Santa Ana," and the City of Irvine, hereinafter referred to as "Irvine." Santa Ana and Irvine are collectively referred to as the "Parties." This AGREEMENT replaces and supersedes in its entirety that certain agreement dated November 24, 1992 by and between the Parties titled "Implementation of Roadway and Interchange Mitigation Program for EIR 88-ZC-0087" ("1992 Agreement."). A true and correct copy of the 1992 Agreement is attached hereto as Exhibit "A."

RECITALS

A. WHEREAS, on July 13, 2010 Irvine certified an Environmental Impact Report for certain General Plan Amendments and Zone Changes that are collectively known as the "IBC Vision Plan." That same evening, Irvine approved the General Plan Amendment for the IBC Vision Plan, and conducted a first reading for the Zone Change for the IBC Vision Plan. On July 27, 2010, Irvine conducted a second reading for the Zone Change for the IBC Vision Plan. The IBC Vision Plan is hereinafter referred to as the "Project." The Project is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek channel to the east, John Wayne Airport and Campus Drive to the south and State Route 55 (SR-55) to the west. The Project is bordered by the cities of Newport Beach, Santa Ana, Costa Mesa and Tustin. The Project includes and/or contemplates (*i*) an increase in total units in the Irvine Business Complex ("IBC") from 9,401 units to 15,000 units, and (ii) a reduction of 2,715,062 square feet of nonresidential development (measured in office equivalency). In addition, a total of 1,191 density bonus units could be allowed (and are therefore assumed as part of the Project) in accordance with state law, resulting in a total of 16,191 units; and

B. WHEREAS, a Traffic Impact Study (TIS) has been prepared for the Project that identifies Project-related impacts and corresponding pro-rata funding fair-shares for the following intersections and roadway segment in Santa Ana:

- Bristol Street at Segerstrom Intersection – 12.7%
- Main Street at Dyer Road Intersection – 21%
- Grand Avenue at Warner Avenue Intersection – 15.8%
- MacArthur Boulevard widening from Main Street to SR55 – 31.1%

Each intersection and roadway segment listed above shall hereinafter be referred to as "Project Impact" and collectively be referred to as "Project Impacts," and the corresponding pro-rata funding fair-shares shall hereinafter be referred to as "Improvement Fair Share Contributions"; and

C. WHEREAS, Santa Ana currently has no fee program designed to collect fees for the mitigation of any of the Project Impacts; and

D. WHEREAS, the Project involves the same land area – the IBC – that was the subject of certain Irvine General Plan Amendment and Irvine Zoning Code Amendments project, together with a mitigation fee program and an Environmental Impact Report ("IBC EIR"), for which approvals and certifications were completed by 1992 (collectively, the "1992 Entitlements"); and

E. WHEREAS, in connection with the 1992 Entitlements, the Parties entered into the 1992 Agreement, which outlines the Parties' roles and responsibilities in implementing certain transportation improvements identified in the 1992 Entitlements; and

F. WHEREAS, the 1992 Agreement may be amended upon the mutual consent of both Parties; and

G. WHEREAS, this Agreement is intended to, and does, restate in full and supersede the 1992 Agreement.

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereby amend and restate in full the 1992 Agreement in full as follows:

1 Limit on new development in the IBC The parties hereto agree that Irvine will not issue building permits for development in the IBC which would cause the total development in the IBC (existing development plus development occurring after the date of this Agreement) to exceed 51,000,000 square feet of office equivalency development (as defined in the Irvine Zoning Code) until after the following street improvements, located in the City of Santa Ana, have been completed:

(a) The widening of Dyer Road to eight (8) lanes from a point commencing just east of the SR-55 freeway northbound direct connector on-ramp to and including the Redhill - Dyer/Barranca Avenue intersection, as provided in the IBC EIR mitigation measures, hereinafter referred to as the "Roadway Improvement".

(b) An Alton Avenue overcrossing of the SR-55 Freeway, hereinafter referred to as the "Overcrossing Improvement".

If, notwithstanding Irvine's agreement to limit the issuance of building permits as set forth hereinabove, the total development in the IBC exceeds 51,000,000 square feet prior to the completion of the Roadway Improvement and Overcrossing Improvement;

A. Irvine shall pay to Santa Ana Irvine's share of the Total Costs (as defined in Section 2 herein below) of the Overcrossing Improvement, to the extent such Total Cost remain unpaid. Any amounts received by Santa Ana pursuant to this paragraph shall be expended by Santa Ana in accordance with Section 3 herein below. As of the date of this agreement, Irvine has issued building permits in the IBC for 41,671,636 square feet of office equivalency development.

B. Irvine shall deposit the Total Costs (as defined in Section 2 herein below)

of the Roadway Improvement, to the extent such Total Costs remain outstanding, in an interest bearing account in a financial institution acceptable to both Irvine and Santa Ana. Irvine shall not withdraw any of the principal of such amount except in connection with the design and construction of the Roadway Improvement, including but not limited to alignment studies, necessary environmental documentation, land acquisition costs, costs of design and construction, and administrative staff costs related to the Roadway Improvements.

2. Responsibilities of the Parties

A. "Total Costs" defined. The term "Total Costs" means all costs incurred in the design and construction of an improvement (i.e., the Roadway Improvement or the Overcrossing Improvement), including, but not limited to, costs of preparation of environmental documentation, costs of land acquisition (including any costs incurred in any eminent domain action), costs of design and construction, and Santa Ana's administrative staff costs, so long as such administrative staff costs related to Roadway Improvement do not exceed 5% of the Total Costs (excluding administrative staff costs) of the improvement ("Improvement Work").

B. To assist in minimizing Total Costs of Roadway Improvement, Santa Ana shall consider and process for approval a reduction of otherwise required landscape setbacks during the right of way acquisition phase of the project if, absent such reduction, the taking of buildings would be necessary to construct the Roadway Improvement. Irvine will mitigate parking losses incurred by any parcels affected by partial acquisitions by the addition of onsite parking spaces through reconfiguration of the site, or by acquisition and development of adjacent real estate for parking. All parking mitigation plans will be subject to the approval of Santa Ana.

C. "Lead Agency" defined. As used herein, the term "Lead Agency" means the city (Irvine or Santa Ana) which is responsible for undertaking the

Improvement Work, either through its own employees or through independent contractors, except as otherwise provided herein below.

D. Funding responsibilities. Irvine shall be responsible for 100% the Total Cost of the Roadway Improvement, less any portion the Total Costs of the Roadway Improvement for which any entity other than Santa Ana assumes responsibility. Irvine will support City of Santa Ana's effort in obtaining local, state and federal grants for the Overcrossing Improvement. Irvine and Santa Ana shall each be responsible for 50% of the Total Costs of the Overcrossing Improvement; provided, however, that if any entity(ies) and/or grant funds other than Irvine or Santa Ana contribute(s) to the Total Costs of the Overcrossing Improvement ("Third Party Contribution(s)"), Irvine's and Santa Ana's contribution shall each be reduced in an amount equal to 50% of said Third Party Contribution(s). Nothing herein shall be construed to restrict the ability of Irvine and/or Santa Ana to obtain funds to meet their funding responsibilities hereunder through the imposition of development fees or such other revenue measures (collectively "Development Fees") as may be deemed appropriate by Irvine and/or Santa Ana, and said Development Fees shall not be deemed to be Third Party Contributions.

Irvine shall have no responsibility to contribute in any way to the mitigation of the Project Impacts (as defined in Recital B above), whether through the payment of the Improvement Fair Share Contribution (as defined in Recital B above) or otherwise. Responsibility for mitigation of the Project Impacts shall belong to Santa Ana or such other entities (other than Irvine) as may assume responsibility to mitigate the Project Impacts.

E. Lead Agency Responsibilities. Except as otherwise provided in Section 3 of this Agreement,
Irvine shall be the Lead Agency for the Roadway Improvement, provided, however, that to the extent that Irvine is unable to acquire land necessary for the Roadway Improvement due to Irvine's inability to apply its powers

of eminent domain to properties located within Santa Ana, Santa Ana shall assume Lead Agency responsibilities with respect to such land acquisition. All design plans and environmental documentation for the Roadway Improvement that is prepared by or on behalf of Irvine as Lead Agency shall be subject to approval by Santa Ana, which approval shall not be unreasonably withheld or delayed; provided, however, that Santa Ana may require all design plans to conform to Santa Ana design standards in effect at the time such plans are submitted.
Santa Ana shall be the Lead Agency with regard to the Overcrossing Improvement. All alignment and design plans and environmental documentation for the Overcrossing Improvement that are prepared by or on behalf of Santa as Lead Agency shall be subject to approval by Irvine, which approval shall not be unreasonably withheld or delayed.

Santa Ana shall indemnify, defend and hold Irvine, its City Council members, officers, officials, employees, agents and representatives harmless from and against any and all actions, claims, demands, judgments, attorneys fees, costs, damage to persons or property, penalties, obligations, expenses or liabilities that may be asserted or claimed by any person or entity arising out of the negligent acts or omissions of Santa Ana in connection with the design, construction or maintenance of the Roadway Improvement or Overcrossing Improvement.

Irvine shall indemnify, defend and hold Santa Ana, its City Council members, officers, officials, employees, agents and representatives harmless from and against any and all actions, claims, demands, judgments, attorneys fees, costs, damage to persons or property, penalties, obligations, expenses or liabilities that may be asserted or claimed by any person or entity arising out of the negligent acts or omissions of Irvine in connection with the design, construction or maintenance of the Roadway Improvement or Overcrossing Improvement; provided, however, that upon completion of the Roadway Improvement, and upon satisfactory completion of inspection by appropriate personnel

for the City of Santa Ana, Irvine shall dedicate or convey the Roadway Improvement in its entirety to Santa Ana (to the extent necessary), and shall thereafter have no further liability or responsibility to Santa Ana in connection with the Improvement Work on the Roadway Improvement. However, Irvine shall cooperate with Santa Ana in the prosecution of any required construction defect claims in regard to the Roadway Improvements.

F. Payment of costs. Irvine shall reimburse Santa Ana for any portion of the Total Costs of the Roadway Improvement incurred by Santa Ana if Santa Ana acts as Lead Agency, subject to the restrictions and limitations contained in this Agreement, as follows:

Santa Ana shall invoice Irvine not more than once monthly for costs incurred since the previous invoice. Each invoice shall be accompanied by a detailed statement of the nature of the costs incurred. Each proper invoice shall be paid by Irvine within thirty (30) days of receipt. The parties agree to meet and confer in good faith to resolve any dispute over any invoice or the need and necessity of any costs incurred. With regard to any action in eminent domain undertaken by Santa Ana in the implementation of this Agreement, Santa Ana may require commercially reasonable advance payments from Irvine at such times as Santa Ana determines to be appropriate to discharge its responsibilities in such action. The provisions of this paragraph may be modified by the mutual agreement of the City Managers of Irvine and Santa Ana.

G. Monitoring of Building Permits. Irvine shall monitor the extent of development authorized by the issuance of building permits in the IBC and submit annual reports to Santa Ana. The Annual Report shall indicate the gross square feet of development authorized by building permits issued for development in the IBC.

H. Cooperation. The Parties shall cooperate in the implementation of this Agreement. In particular, Irvine will: (*i*) retain the Overcrossing Improvement and the Roadway Improvement in the County's Master Plan of Arterial Highways (MPAH), (*ii*) support Santa Ana in any application for grant funding for the Overcrossing Improvement, and (*iii*) support Santa Ana in requesting that Orange County Transportation Authority (OCTA) include the Overcrossing Improvement as part of the SR55 freeway widening project. Similarly, Santa Ana will: (*i*) support Irvine in any application for grant funding for the Roadway Improvement.

3. Payment by Irvine to Santa Ana of Irvine's share:

A. Overcrossing Improvement. If Santa Ana does not have available funds necessary to enable it to perform its funding obligation for the Overcrossing Improvement at such time as Irvine is prepared to provide funds for the completion of the Overcrossing Improvements, the City Managers of Irvine and Santa Ana shall defer the construction of the Overcrossing Improvement to a mutually agreeable date, provided, however, in the event that parties can not mutually agree upon a deferred date, Irvine may choose to pay Santa Ana the amount of its obligations for the completion of the Overcrossing Improvement in order to be relieved and would in that event, notwithstanding any other provision of this Agreement, be permitted to issue building permits for development in excess of 51,000,000 square feet in the IBC,

B. Amount of payments. The payment due to Santa Ana from Irvine pursuant to this section shall be the estimated Total Cost of the Overcrossing Improvement as agreed between Irvine and Santa Ana, to the extent of the work that remains to be done, at the time payment is made.

C. Use of funds by Santa Ana. Any funds received by Santa Ana from Irvine pursuant to this section for the Overcrossing Improvement shall be maintained in a separate fund by Santa Ana, which fund shall be used solely for the completion of the Overcrossing Improvement.

4. Amendment of Santa Ana General Plan. Santa Ana shall process a General Plan Amendment, as necessary to accommodate the Roadway Improvement (the "GPA"). The Parties acknowledge that as part of the GPA, Santa Ana may alter its current designations for Dyer Road outside the area of the Roadway Improvement. Irvine shall not object to any portion of the GPA that is consistent with this Paragraph 4. Until Santa Ana amends its General Plan to accommodate the Roadway Improvement, or certifies to Irvine that the Santa Ana General Plan accommodates the Roadway Improvement, Irvine shall have no obligation to fund the Roadway Improvement.

5. Covenant Not to Sue. Each Party, and its respective agents, officers, employees, representatives and assigns hereby agrees and covenants that this Agreement forever satisfies any past, present, or future claims which the Party, and its agents, officers, employees, representatives or assigns had, has or may have against the other Party or its agents, officers, employees, representatives, and assigns arising out of the IBC Vision Plan, the 1992 Entitlements and the 1992 Agreement. Each Party hereto covenants not to file any future legal actions of whatever kind or nature against the other Party regarding any claim in connection with the IBC Vision Plan, the 1992 Entitlements and the 1992 Agreement, whether such claim is known or unknown, suspected or unsuspected, fixed or contingent.

6. Waiver of Civil Code Section 1542. With regard to matters arising from or related to IBC Vision Plan, the 1992 Entitlements and/or the 1992 Agreement, each of the Parties hereto expressly waives any and all rights that they may have under Civil Code section 1542 ("Section 1542") or any Federal or State statutory right, rules or principles of common law or equity or those of any other jurisdiction, government or political subdivision thereof, similar to Section 1542 ("Similar Provision"). Thus, no Party hereto may invoke the benefit of Section 1542 or any Similar Provision in order to prosecute or assert in any manner any claim released hereunder that arises from or relates to the IBC Vision Plan, the 1992 Entitlements and/or the 1992 Agreement. Section 1542 provides that: "a general

release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially effected his settlement with the debtor. "

Santa Ana Initials: _____

Irvine initials: _____

7. Integration. This Agreement represents the entire understanding of the Parties hereto. No prior or contemporaneous oral or written understanding shall be of any force or effect with respect to those matters covered in this Agreement. This Agreement may not be altered, amended, or modified except by mutual consent of the Parties hereto through a written instrument.

8. California Law. This Agreement shall be construed and interpreted both as to its validity and as to the performance of the Parties in accordance with the laws of the State of California.

9. Execution and Counterparts. This Agreement may be executed and delivered in any number of counterparts or copies ("Counterpart") by the Parties hereto.

10. Authority to Execute. Each person executing this Agreement on behalf of a Party hereto warrant that he or she is duly authorized to execute this Agreement on behalf of said Party and that by so executing this Agreement, each Party formally binds itself to the provisions of this Agreement. Each person executing this Agreement further acknowledges that he or she has obtained all necessary and legally required approvals for entry into this Agreement from legislative or governing boards and that such legislative or governing board has adopted a resolution, motion, ordinance or other action pursuant to State law and its own bylaws or ordinances for approval of this Agreement.

11. Notices. Every notice, demand, request, annual report, or other document or instrument delivered pursuant to this Agreement shall be in writing and shall either be personally delivered, sent by Federal Express or other reputable over-night courier, sent by facsimile transmission with the original subsequently

delivered by any other means authorized herein, or sent by certified United States mail, postage prepaid, return receipt requested, to the address set forth below for the applicable Party, or such other address as Parties may designate from time to time:

To the City: City of Irvine
City Hall
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92713
Attn: City Manager
cc: Director of Community Development
Director of Public Works
Telephone: (714) 724-6000
Fax: (714) 724-6075

To the City: City of Santa Ana
20 Civic Center Plaza
P.O. Box 1988
Santa Ana, CA 92702
Attn: City Manager
cc: Executive Director of Planning and Building
Executive Director of Public Works
Telephone: (714) 647-6900
Fax: (714) 647-6951

12. Severability. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

13. Amendment and Restatement: This Agreement amends and restates, and thereby supersedes in full, the 1992 Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment To and Restatement Of the 1992 Agreement as set forth below.

"Irvine"
CITY OF IRVINE

By: _____
Sukhee Kang, Mayor

APPROVED AS TO FORM:

By: _____
Philip D. Kohn
City Attorney

ATTEST:

By: _____
Shari Apodaca
City Clerk of the City of Irvine

"Santa Ana"
CITY OF SANTA ANA

By: _____
David N. Ream, City Manager

APPROVED AS TO FORM:

By: _____
City Attorney

ATTEST:

By: _____
Clerk of the Council, City of Santa Ana

REL: 11/20/92

AGREEMENT

This Agreement for IMPLEMENTING ROADWAY AND INTERCHANGE MITIGATION PROGRAM ("Agreement") is made and entered into as of this 24th day of November, 1992 (the "Effective Date"), by and between the City of Irvine, a California charter city ("Irvine") and the City of Santa Ana, a California municipal corporation ("Santa Ana") (collectively referred to as the "Parties").

R E C I T A L S

A. Irvine has certified Environmental Impact Report 88-ER-0087 (the "IBC EIR"), as adequate and complete and adopted General Plan Amendment No. 7234-GA, and Zoning Amendment 88-ZC-0135 (collectively the "IBC Rezoning") to amend the land use designation and zoning in that portion of the City known as the Irvine Business Complex (the "IBC"), more specifically defined as that area depicted on Exhibit "A," attached hereto and incorporated herein by this reference.

B. The IBC EIR analyzes the IBC Rezoning and concludes that the mitigation measures contained therein will adequately accommodate the traffic impacts which are anticipated to be generated by the IBC Rezoning.

C. Certain mitigation measures discussed in the IBC EIR and adopted as part of the IBC Rezoning are Roadway and Interchange Improvements which are to be constructed within the municipal boundaries of Santa Ana.

EXHIBIT A

2750

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties hereto agree as follows:

1. Limit on new development in the IBC.

The parties hereto agree and stipulate that, as of the date of this Agreement, Irvine has approximately 39,846,000 square feet of development within the IBC. Except as otherwise provided in this Agreement, Irvine agrees that it will not issue building permits for development in the IBC which would cause the total development in the IBC (presently existing development plus development occurring after the date of this Agreement) to exceed 51,000,000 square feet until after the following street improvements, located in the City of Santa Ana, have been completed:

(a) The widening of Dyer Road to eight (8) lanes from a point commencing just east of the SR-55 freeway northbonnd direct connector on-ramp to and including the Redhill-Dyer/Barranca Avenue intersection, as provided in the IBC EIR mitigation measures (numbers 1.a. and 2.p.) (the "Roadway Improvements").

(b) An Alton Avenue overcrossing of the SR-55 freeway with high occupancy vehicle northbound and southbound drop ramps, as provided in the IBC EIR mitigation measures (numbers 1.d and 3.b.) (the "Interchange Improvements").

Irvine further agrees that in the event that, notwithstanding Irvine's agreement to limit the issuance of building permits as abovesaid, the total development in the IBC does exceed 51,000,000 square feet prior to the completion of the Roadway Improvements and

the Interchange Improvements:

(a) Irvine shall be liable to Santa Ana for Irvine's share of the Total Costs (as defined in Section 2 hereinbelow) of the Interchange Improvements, to the extent such Total Costs remain outstanding, and shall pay such amount to Santa Ana. Any amonnts received by Santa Ana pursuant to this paragraph for the Interchange Improvements shall be expended by Santa Ana in accordance with Section 3 hereinbelow.

(b) Irvine shall deposit the Total Costs (as defined in Section 2 hereinbelow) of the Roadway Improvements, to the extent such Total Costs remain outstanding, in an interest bearing account in a financial institution acceptable to both Irvine and Santa Ana. Irvine shall not withdraw any of the principal of such amount except in connection with the design and construction of the Roadway Improvements, including but not limited to alignment studies and any environmental documentation which may be necessary in addition to the IBC EIR, costs of land acquisition (including any costs incurred in any eminent domain action), costs of design and construction, and administrative staff costs related to the Roadway Improvements. Any and all interest earned on the amounts deposited in such account shall be paid to Santa Ana.

Notwithstanding anything to the contrary in the IBC EIR or in the environmental findings approved by Irvine in its approval of

the IBC Rezoning, the parties hereto agree that the completion of the Roadway Improvements and the Interchange Improvements in accordance with this Agreement (and subject to the exceptions set forth in this Agreement) are appropriate and necessary mitigation measures for the IBC Rezoning under the California Environmental Quality Act.

2. Responsibilities of the Parties.

a. "Total Costs" defined. As used with reference to the Roadway Improvements and/or the Interchange Improvements, the term "Total Costs" means all costs incurred in the completion of those improvements, including, but not limited to, costs of preparation of alignment studies and any environmental documentation which may be necessary in addition to the IBC EIR, costs of land acquisition (including any costs incurred in any eminent domain action), costs of design and construction, and administrative staff costs.

b. "Lead Agency" defined. As used herein, the term "Lead Agency" means the city (Irvine or Santa Ana) which is responsible for undertaking the work necessary to complete the Roadway Improvements and/or the Interchange Improvements, including, but not limited to, preparation of alignment studies and any environmental documentation which may be necessary in addition to the IBC EIR, land acquisition, and design and construction, either through its own employees or through independent contractors, except as otherwise provided hereinbelow.

c. Funding responsibilities. Irvine shall be

responsible for 100% of the Total Costs of the Roadway improvements, exclusive of any portion thereof as to which any governmental entity other than Santa Ana may assume responsibility. Irvine and Santa Ana shall each be responsible for 50% of the Total Costs of the Interchange Improvements, exclusive of any portion thereof as to which any governmental entity other than Irvine or Santa Ana may assume responsibility. Nothing herein shall be construed to restrict the ability of either city to obtain funds to meet its funding responsibilities hereunder through the imposition of development fees or such other revenue measures as may be deemed appropriate by that city.

d. Lead Agency responsibilities. Except as otherwise provided in paragraph b of Section 3 of this Agreement, Irvine shall be the Lead Agency for the Roadway Improvements, provided, however, that to the extent that Irvine is unable to acquire land necessary for the Roadway Improvements due to Irvine's inability to exercise powers of eminent domain in the jurisdiction of the City of Santa Ana, Santa Ana shall assume Lead Agency responsibilities with respect to such land acquisition. Santa Ana shall be the Lead Agency with regard to the Interchange Improvements. All alignment and design plans and environmental documentation prepared by or on behalf of Irvine as Lead Agency shall be subject to approval by Santa Ana, which approval shall not be unreasonably withheld or delayed; provided, however, that Santa Ana may require all design plans to conform to Santa Ana design standards in effect at the time such plans are submitted.

Santa Ana shall indemnify, defend and hold Irvine, its councilmembers, officers, officials, employees, agents and representatives harmless from and against any and all actions, claims, demands, judgments, attorneys fees, costs, damage to persons or property, penalties, obligations, expenses or liabilities that may be asserted or claimed by any person or entity arising out of the negligent acts or omissions of Santa Ana in connection with the design, construction or maintenance of the Roadway Improvements or Intersection Improvements.

Irvine shall indemnify, defend and hold Santa Ana, its councilmembers, officers, officials, employees, agents and representatives harmless from and against any and all actions, claims, demands, judgments, attorneys fees, costs, damage to persons or property, penalties, obligations, expenses or liabilities that may be asserted or claimed by any person or entity arising out of the negligent acts or omissions of Irvine in connection with the design, construction or maintenance of the Roadway Improvements or Intersection Improvements.

e. Payment of costs. For any portion of Total Costs incurred by Santa Ana as Lead Agency, Irvine shall pay to Santa Ana Irvine's funding obligation for such costs, as determined pursuant to paragraph a of this section, as follows: Santa Ana shall invoice Irvine not more than once monthly for costs incurred since the previous invoice. Each invoice shall be accompanied by a detailed statement of the nature of the costs incurred. Each proper invoice shall be paid by Irvine within thirty (30) days of

receipt. The parties agree to meet in good faith to resolve any dispute over any invoice or the need and necessity of any costs incurred. With regard to any action in eminent domain action undertaken by Santa Ana in the implementation of this Agreement, Santa Ana may require payments from Irvine at such times as Santa Ana determines to be appropriate to discharge its responsibilities in such action. The provisions of this paragraph may be modified and/or elaborated by the mutual agreement of the City Managers of Irvine and Santa Ana.

f. Monitoring of building permits. Irvine shall monitor the extent of development authorized by the issuance of building permits in the IBC and submit quarterly reports to Santa Ana commencing on or about the first week of January, 1993 (the "Quarterly Report"). The Quarterly Report shall indicate the gross square feet of development authorized by building permits issued for development in the IBC.

g. Cooperation. The parties hereto agree to cooperate in the implementation of this Agreement. In particular, but without limitation, Santa Ana and Irvine shall exercise good faith in cooperating with the California Department of Transportation ("Caltrans") in negotiating and entering into all necessary cooperative agreements for the funding, design, and construction of the Interchange Improvements.

3. Payment by Irvine to Santa Ana of Irvine's share.

a. The Interchange Improvements. In the event that (1) Santa Ana does not have available funds necessary to

enable it to perform its funding obligation for the Interchange Improvements at such time as Irvine is prepared to provide funds for the completion of its funding obligations for the Interchange Improvements, or (2) Caltrans has not taken any and all actions required by it to permit the construction of the Interchange Improvements at such time as Irvine is prepared to provide funds for the completion of its funding obligations for the Interchange Improvements, the City Managers of Irvine and Santa Ana shall defer the construction of the Interchange Improvements to a mutually agreeable date; provided, however, that in the event the parties cannot mutually agree upon a deferred date, Irvine shall pay to Santa Ana the amount of its funding obligation for the Interchange Improvements, and Irvine shall thereupon be relieved of any further responsibility for the completion of the Interchange Improvements pursuant to Section 1 of this Agreement, and the completion of the Interchange Improvements shall no longer be condition precedent to the issuance of building permits for development in excess of 51,000,000 square feet in the IBC.

b. Amount of payments. The amount of the payment due to Santa Ana from Irvine pursuant to this Section shall be the estimated Total Cost of the Interchange Improvements, to the extent of the work that remains to be done, at the time payment is made.

c. Use of funds by Santa Ana. Any funds received by Santa Ana from Irvine pursuant to this Section for the Interchange Improvements shall be used for the completion of the Interchange Improvements.

4. Amendment of Santa Ana General Plan.

Within two years of the execution of this Agreement, Santa Ana shall, if necessary, take action to amend its General Plan to accommodate the Interchange Improvements contemplated by this Agreement. In the event of any litigation challenging the amendment of Santa Ana's general plan to accommodate the Interchange Improvements, the abovesaid time period shall be extended for such time as may be necessary to resolve such litigation. Irvine shall not object to that portion of the Santa Ana General Plan amendment relating to the Interchange Improvements. In the event that, after the expiration of the abovesaid time period, Santa Ana has not amended its General Plan to accommodate the Interchange Improvements at such time as Irvine is prepared to provide funds for the completion of its funding obligations for the Interchange Improvements, then the completion of the Interchange Improvements shall no longer be a condition precedent to the issuance of building permits for development in excess of 51,000,000 square feet in the IBC. Unless and until Santa Ana amends its General Plan to accommodate the Interchange Improvements, or certifies to Irvine that the Santa Ana General Plan accommodates the Interchange Improvements, Irvine shall have no obligation to fund the Interchange Improvements.

Within two years of the execution of this Agreement, Santa Ana shall take an action to amend its General Plan to accommodate the Roadway Improvement contemplated by this Agreement. In the event of any litigation challenging the amendment of Santa

Ana's general plan to accommodate the Roadway Improvement, the abovesaid time period shall be extended for such time as may be necessary to resolve such litigation. Irvine shall not object to that portion of the Santa Ana General Plan amendment relating to the Roadway Improvements or to any Santa Ana General Plan designation of any portion of Dyer Road outside of the area of the Roadway Improvements adopted to effectuate this Agreement. In the event that, after the expiration of the abovesaid time period, Santa Ana has not amended its General Plan to accommodate the Roadway Improvements at such time as Irvine is prepared to acquire land for the Roadway Improvements, then Irvine shall no longer have any obligation under this Agreement to construct or fund the Roadway Improvements.

5. Participation in Five-City Study.

Irvine shall not request Santa Ana's participation in the Five-City study referenced in IBC EIR Condition No. 8 and IBC Mitigation Monitoring and Reporting Checklist Mitigation Measure No. 7A.

6. Payment for Main Street Widening.

Irvine shall not request that Santa Ana contribute any funds whatsoever for the widening of Main Street to six (6) lanes between Sunflower Avenue and San Diego Creek.

7. Covenant Not to Sue.

Each Party, and its respective agents, officers, employees, representatives and assigns hereby agrees and covenants that this Agreement forever satisfies any past, present, or future

claims which the Party, and its agents, officers, employees, representatives or assigns had, has or may have against the other Party or its agents, officers, employees, representatives, and assigns arising out of the IBC Rezoning and/or the preparation and certification of the IBC EIR. As a result, each Party hereto covenants not to file any future legal actions of whatever kind or nature against the other Party regarding any claim in connection with the IBC Rezoning or the IBC EIR whether such claim is known or unknown, suspected or unsuspected, fixed or contingent.

8. Waiver of Civil Code Section 1542.

Each of the Parties hereto expressly waives any and all rights under Section 1542 of the California Civil Code or any Federal or State statutory right, rules or principles of common law or equity or those of any other jurisdiction, government or political subdivision thereof, similar to Civil Code Section 1542 (hereinafter referred to "Similar Provision"). Thus, no Party hereto may invoke the benefit of Section 1542 or any Similar Provision in order to prosecute or assert in any manner any claim released hereunder. Section 1542 provides that:

> "a general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially effected his settlement with the debtor."

9. Integration.

This Agreement represents the entire understanding of the Parties hereto. No prior or contemporaneous oral or written

understanding shall be of any force or effect with respect to those matters covered in this Agreement. This Agreement may not be altered, amended, or modified except by mutual consent of the Parties hereto through a written instrument.

10. Attorneys Fees.

In the event that any Party hereto should bring any action, suit or other proceeding to remedy, prevent, or obtain relief from a breach of this Agreement or arising out of a breach of this Agreement, or contesting the validity of this Agreement or attempting to rescind, negate, modify, or reform this Agreement, or any of the terms or provisions of this Agreement, the prevailing Party shall recover from such Party those reasonable attorneys fees and costs, including expert fees, incurred in each and every such action, suit, or other proceeding, including any and all appeals or petitions therefrom.

11. California Law.

This Agreement shall be construed and interpreted both as to validity and performance of the Parties in accordance with the laws of the State of California.

12. Execution and Counterparts.

This Agreement may be executed and delivered in any number of counterparts or copies ("Counterpart") by the Parties hereto.

13. Authority to Execute.

The persons executing this Agreement on behalf of the Parties hereto warrant that they are duly authorized to execute

this Agreement on behalf of said Parties and that by so executing this Agreement, the Parties hereto are formally bound to the provisions of this Agreement. Each person further acknowledges that he or she has obtained all necessary and legally required approvals for entry into this Agreement from legislative or governing boards and that it has adopted a resolution, motion, ordinance or other action pursuant to State law and its own bylaws or ordinances for approval of this Agreement.

14. Notices.

Every notice, demand, request, or other document or instrument delivered pursuant to this Agreement shall be in writing and shall either be personally delivered, sent by Federal Express or other reputable over-night courier, sent by facsimile transmission with the original subsequently delivered by any other means authorized herein, or sent by certified United States mail, postage prepaid, return receipt requested, to the address set forth below for the applicable Party, or such other address as Parties may designate from time to time:

To the City: City of Irvine
City Hall
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92713
Attn: City Manager
cc: Director of Community Development
Telephone: (714) 724-6000
Fax: (714) 724-6075

To the City: City of Santa Ana
20 Civic Center Plaza
P.O. Box 1988
Santa Ana, CA 92702
Attn: City Manager
cc: Executive Director of Planning and Building
Telephone: (714) 647-6900
Fax: (714) 647-6951

15. Severability clause.

The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date appearing next to their signatures.

Dated: 12/23/92

ATTEST:

Janice C. Guy
Clerk of the Council

APPROVED AS TO FORM:

Edward J. Cooper
City Attorney

CITY OF SANTA ANA

by
Daniel H. Young
Mayor

Dated: 11-24-92

ATTEST:

Clerk of the Council

APPROVED AS TO FORM:

City Attorney

CITY OF IRVINE

by
Mayor

Approved as to content

City Manager

Appendix D: Detail Layout and Cost Estimate Worksheets for Improvements

City of Irvine

City of Irvine List of Improvements and Associated Costs

Jurisdiction	Int ID	Intersection / Arterial Location	Improvement Strategy	Cost				Fair Share %	Total Cost to IBC Fee
				Construction Subtotal	ROW Subtotal	Contingency Cost*	Total		
Irvine	97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway	Add 3rd NBT and convert de facto right-turn to standard NBR	$2,918,631	$2,880,767	$1,759,316	$7,558,713	90%	$6,802,842
Irvine	98	Von Karman Avenue at Alton Parkway	Add 3rd NBT						
Irvine	134	Loop Road/Park Avenue at Warner Avenue	Add 3rd EBT and NBR overlap	$3,169,280	$340,175	$1,901,568	$5,411,023	90%	$4,869,921
Irvine	135	Jamboree NB Ramps/Warner Avenue	Add 2nd EBL	$1,389,515	$208,725	$994,757	$2,592,998	90%	$2,333,698
Irvine	188	Harvard Avenue at Michelson Drive	Widen SB to 2,2,1	$1,628,028	$10,725	$1,114,014	$2,752,766	90%	$2,477,489
Irvine	229	Culver Drive at Alton Parkway	Improve EB to 2,3,0 (de facto right)	$587,290	$23,095	$593,646	$1,204,030	90%	$1,083,627
Irvine		Red Hill Avenue between Main Street and Mac Arthur Boulevard	Widen from 4 lanes to 6 lanes.	$7,088,805	$7,077,301	$4,253,284	$18,419,390	90%	$16,577,451
Irvine		Gillette Avenue at Alton Parkway	New traffic signal (T-intersection)	$350,000	$0	$137,500	$487,500	90%	$438,750
								TOTAL	$34,583,778

*Contingency cost includes:

- Preliminary Project Development Cost (10% Construction Cost, minimum $300,000)
- Design Engineering/Administration Cost (15% Construction Cost)
- Construction Engineering Cost/Administration (15% Construction Cost)
- Contingency (20% Construction Cost)

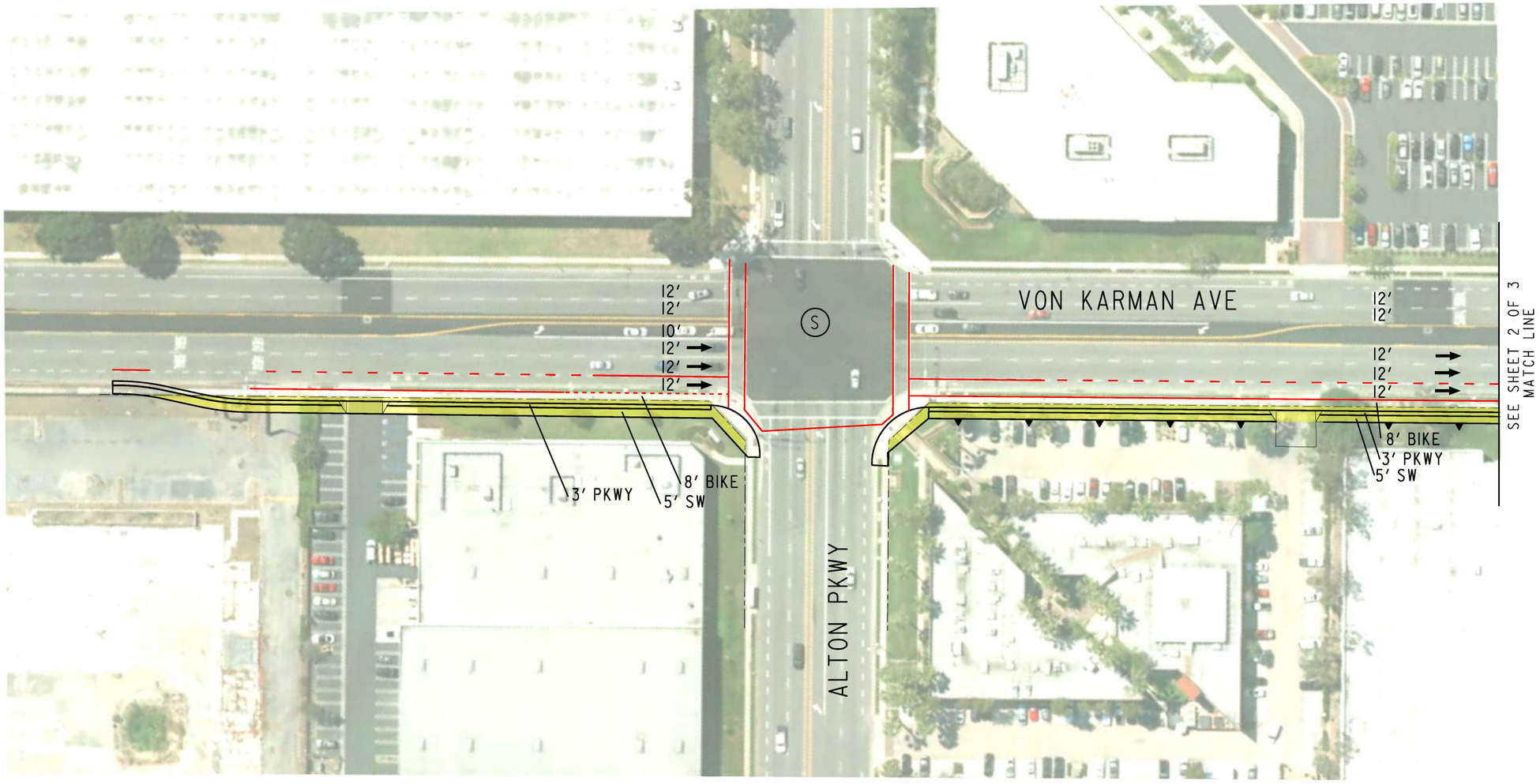
97 - Von Karman Avenue/Tustin Ranch Road at Barranca Parkway
and
98 - Von Karman Avenue at Alton Parkway

Irvine IBC - Nexus Study

Cost Estimate

Intersections #97 and #98
Von Karman Ave & Barranca Pkwy and Von Karman Ave & Alton Pkwy
Mitigations: Add 3rd NBT lane, Convert defacto right-turn to standard NBR

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	**0.85**	**$10,370**	
2	Earthwork	$46.00	CY	**1900**	**$87,400**	
3	Remove Curb & Gutter	$24.00	LF	**3085**	**$74,040**	
4	Remove Median Curb	$30.00	LF		**$0**	
5	Remove PCC Sidewalk	$5.00	SF	**16305**	**$81,525**	
6	Remove Pavement	$5.00	SF	**9600**	**$48,000**	
7	Remove Channel	$40.00	LF		**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF		**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF		**$0**	
10	Remove & Replace Tree	$1,500.00	EA	**46**	**$69,000**	
11	Modify Driveway	$6,100.00	EA	**11**	**$67,100**	
12	Construct PCC Pavement	$14.00	SF		**$0**	
13	Construct AC Pavement	$8.00	SF	**34949**	**$279,592**	
14	Construct AC Overlay	$3.60	SF		**$0**	
15	Construct Slurry Seal	$0.40	SF		**$0**	
16	Construct AC Dike	$15.00	LF		**$0**	
17	Construct Curb & Gutter	$30.00	LF	**3042**	**$91,260**	
18	Construct Concrete Barrier	$80.00	LF		**$0**	
19	Construct Median Curb	$31.00	LF	**25**	**$775**	
20	Construct Median Concrete	$15.00	SF		**$0**	
21	Construct Median/Parkway Landscaping	$13.00	SF	**6719**	**$87,347**	
22	Construct PCC Sidewalk	$9.05	SF	**14590**	**$132,040**	
23	Construct Wheelchair Ramp	$6,000.00	EA	**12**	**$72,000**	
24	Construct Retaining Wall	$75.00	SF	**6360**	**$477,000**	Average Height = 3'
25	Remove Retaining Wall	$35.00	SF		**$0**	Caltrans has $35 per SF. $74 too high.
26	Relocate Monument Wall	$20,000.00	EA		**$0**	
27	Parkway Drain	$1,000.00	EA	**9**	**$9,000**	
28	Sawcut	$4.00	LF	**3032**	**$12,128**	
	ROADWAY SUBTOTAL				**$1,598,577**	
	TRAFFIC					
29	Remove Striping	$3.00	LF	**3100**	**$9,300**	Caltrans Cost $3 per LF. $13 too high.
30	Relocate Street Light	$6,200.00	EA	**12**	**$74,400**	
31	Modify Traffic Signal	$325,000.00	EA	**1**	**$325,000**	Alton Pkwy, Barranca Pkwy signals
32	New Traffic Signal	$425,000.00	EA		**$0**	
33	Install Striping	$5.00	LF	**4930**	**$24,650**	
34	Relocate Freeway Sign (2 post)	$700.00	EA		**$0**	
35	Loop Detector	$2000.00	EA	**8**	**$16,000**	
36	Relocate Sign (1 post)	$220.00	EA	**30**	**$6,600**	
37	Overhead Sign (2 posts)	$240,000.00	EA		**$0**	
38	Relocate Bus Bench	$1,458.00	EA	**1**	**$1,458**	
39	Install Ramp Metering System	$80,000.00	EA		**$0**	
40	Install Delineator	$36.60	EA		**$0**	
41	Apply ATMS	$113,165.00	LS		**$0**	
	TRAFFIC SUBTOTAL				**$457,408**	
	UTILITIES AND DRAINAGE					
42	Relocate Call Box	$2,051.00	EA		**$0**	
43	Relocate Power Pole	$25,000.00	EA		**$0**	
44	Relocate Catch Basin	$9,760.00	EA	**2**	**$19,520**	
45	Relocate Fire Hydrant	$5,000.00	EA		**$0**	
46	Relocate Utility Boxes	$1000.00	EA	**50**	**$50,000**	
47	Relocate Main Water Valve	$12,200.00	EA		**$0**	
48	Relocate Utility Vault	$10,000.00	EA	**6**	**$60,000**	
49	Adjust Manhole to Grade	$1,500.00	EA		**$0**	
50	Adjust Water Meter	$1000.00	EA		**$0**	
51	Adjust Water Valve	$1000.00	EA	**2**	**$2,000**	
52	Adjust Minor Above Ground Utilities	$1000.00	EA		**$0**	
53	Construct Striping & Marking	$2.00	LF		**$0**	
54	Construct Storm Drain Main	$122.00	LF		**$0**	
55	Construct RCB	$549.00	CY		**$0**	
56	Construct Channel (Earthen)	$12.20	LF		**$0**	
57	Relocate FDC	$15000.00	EA	**5**	**$75,000**	
58	Construct Concrete V-Ditch	$19.00	LF		**$0**	
59	Construct Bridge Widening	$500.00	SF		**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$206,520**	
	GENERAL					
60	Mobilization	10.00%	LS	**1**	**$226,250**	
61	Traffic Control	8%	LS	**1**	**$181,000**	
62	Utility Relocations	5%	LS	**1**	**$113,125**	
63	SWPPP Plan and Implementation	6%	LS	**1**	**$135,750**	
	CONSTRUCTION SUBTOTAL				**$2,918,631**	
	RIGHT-OF-WAY					
64	Right-Of-Way	$70.00	SF	**34721**	**$2,430,470**	Increase for 2016
65	Parking Impacts	$20,000.00	EA	**5**	**$100,000**	
66	Temporary Construction Easements	$6.50	SF	**15000**	**$97,500**	
67	Right-of-Way Management	10%	LS	**1**	**$252,797**	
	RIGHT-OF-WAY SUBTOTAL				**$2,880,767**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$5,799,398**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$437,795**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$437,795**	
Contingency (20% Construction Cost)					**$583,726**	
TOTAL PROJECT COSTS					**$7,558,713**	



LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
- PROPOSED ROW
- XX′ PROPOSED LANE WIDTH
- PROPOSED RETAINING WALL

MITIGATIONS - IRVINE INTERSECTION 98
(VON KARMAN AVE & ALTON PKWY)

(1) ADD 3RD NORTHBOUND THROUGH LANE

MITIGATIONS - IRVINE INTERSECTION 97
(VON KARMAN AVE AT BARRANCA PKWY)

(1) ADD 3RD NORTHBOUND THROUGH LANE

(2) CONVERT DEFACTO RIGHT-TURN TO STANDARD NBR

IRVINE INTERSECTIONS 97 & 98
VON KARMAN AVE AT BARRANCA PKWY
VON KARMAN AVE AT ALTON PKWY
SHEET 1 OF 3

SEPTEMBER 14, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
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IRVINE INTERSECTIONS 97 & 98
VON KARMAN AVE AT BARRANCA PKWY
VON KARMAN AVE AT ALTON PKWY
SHEET 2 OF 3

SEPTEMBER 14, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
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IRVINE INTERSECTIONS 97 & 98
VON KARMAN AVE AT BARRANCA PKWY
VON KARMAN AVE AT ALTON PKWY
SHEET 3 OF 3

DECEMBER, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

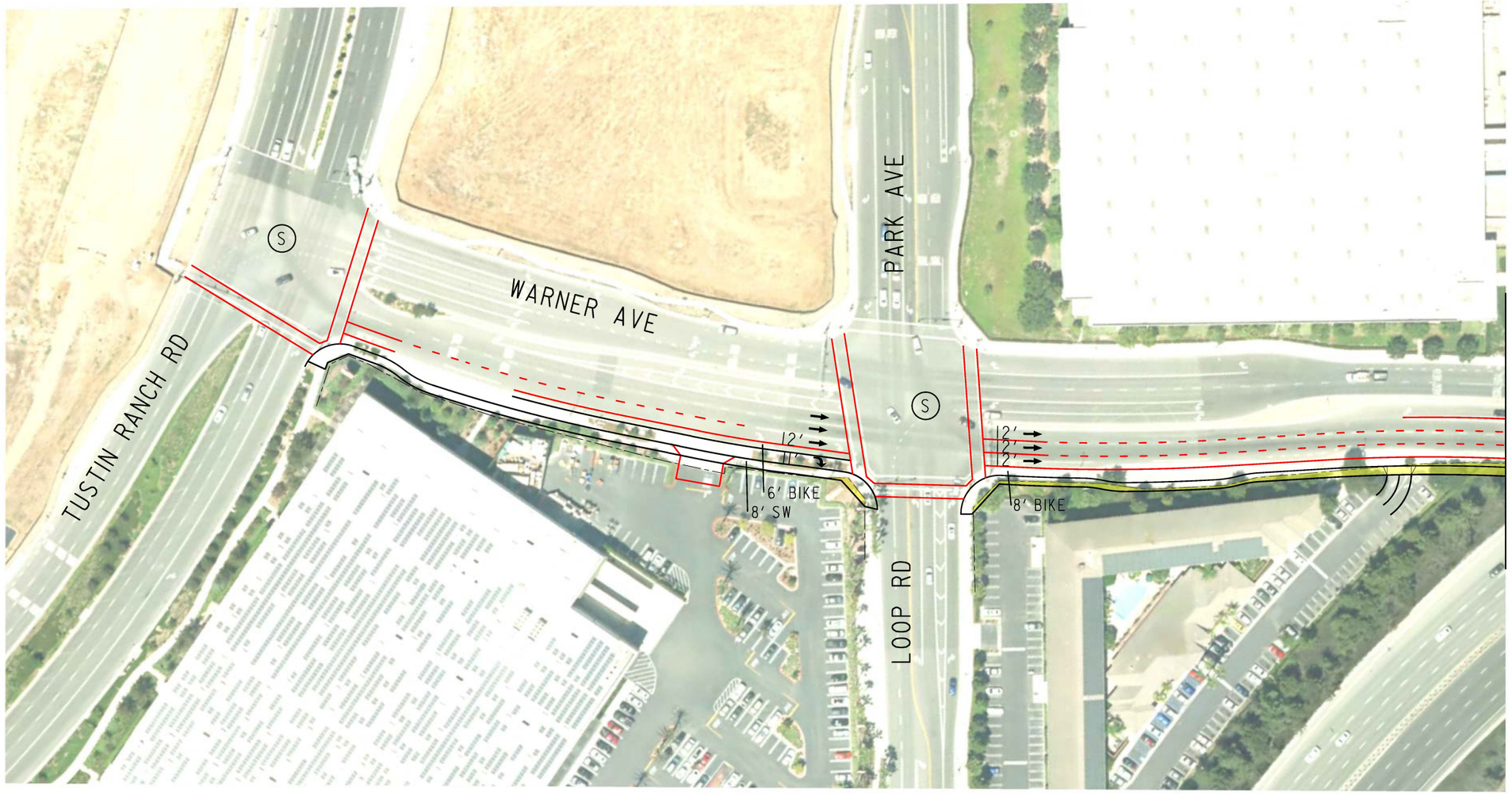
134 - Loop Road/Park Avenue at Warner Avenue

Irvine IBC - Nexus Study

Cost Estimate

Intersection 134
Loop Rd/Park Ave & Warner Ave

ITEM #	DESCRIPTION OF WORK	UNIT PRICE (2012 STUDY)	UNIT PRICE (HDR REVISION)	UNIT	QUANTITY	COST	NOTES
	ROADWAY						
1	Clear & Grub	$12,200.00	$12,200.00	AC	0.34	**$4,201**	
2	Earthwork	$46.00	$46.00	CY	3500	**$161,000**	
3	Remove Curb & Gutter	$36.00	$24.00	LF	1500	**$36,000**	Caltrans has $24 per LF. $36 too high
4	Remove Median Curb	$37.00	$30.00	LF	0	**$0**	Caltrans has $30 per LF. $37 too high
5	Remove PCC Sidewalk	$5.00	$5.00	SF	12800	**$64,000**	
6	Remove Pavement	$5.00	$5.00	SF	3700	**$18,500**	PCC bus stop pad
7	Remove Channel	$40.00	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$31.00	$35.00	LF	0	**$0**	
9	Reconstruct Metal Beam Guard Rail	$86.00	$40.00	LF	0	**$0**	Caltrans has $30 per LF. $86 too high
10	Remove & Replace Tree	$1,500.00	$1,500.00	EA	10	**$15,000**	
11	Modify Driveway	$6,100.00	$6,100.00	EA	2	**$12,200**	
12	Construct PCC Pavement	$7.50	$14.00	SF	3700	**$51,800**	2 bus pads
13	Construct AC Pavement	$6.00	$8.00	SF	15000	**$120,000**	
14	Construct AC Overlay	$2.50	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	$0.40	SF	0	**$0**	
16	Construct AC Dike	$4.00	$15.00	LF	0	**$0**	
17	Construct Curb & Gutter	$19.00	$30.00	LF	1500	**$45,000**	$30 per recent Irvine bids
18	Construct Concrete Barrier	$295.00	$80.00	LF	0	**$0**	Caltrans has $80 per LF.
19	Construct Median Curb	$31.00	$31.00	LF	0	**$0**	
20	Construct Median Concrete	$7.90	$15.00	SF	0	**$0**	
21	Construct Median/Parkway Landscaping	$13.00	$13.00	SF	10000	**$130,000**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	$9.05	SF	12800	**$115,840**	
23	Construct Wheelchair Ramp	$5,200.00	$6,000.00	EA	8	**$48,000**	6 curb returns and 1 ADA ramp mod
24	Construct Retaining Wall	$114.00	$75.00	SF	855	**$64,125**	285' x 3'
25	Remove Retaining Wall	$74.00	$35.00	SF	0	**$0**	
26	Relocate Monument Wall	$20,000.00	$20,000.00	EA	1	**$20,000**	
27	Tie-Back Wall (Includes Structural Ex, R&R PCC Slope paving)	-	$300.00	SF	3000	**$900,000**	
28	Sawcut	$1.25	$4.00	LF	1500	**$6,000**	
	ROADWAY SUBTOTAL					**$1,811,666**	
	TRAFFIC						
29	Remove Striping	$13.00	$3.00	LF	3350	**$10,050**	Caltrans Cost $3 per LF. $13 too high.
30	Remove Pavement Markings	-	$150.00	EA	11	**$1,650**	
31	Relocate Street Light	$5,700.00	$6,200.00	EA	7	**$43,400**	
32	Modify Traffic Signal	$300,000.00	$325,000.00	EA	1.25	**$406,250**	
33	New Traffic Signal	-	$425,000.00	EA	0	**$0**	
34	Install Striping	-	$5.00	LF	5600	**$28,000**	
35	Install Pavement Markings	-	$350.00	EA	11	**$3,850**	
36	Relocate Freeway Sign (2 post)	$700.00	$700.00	EA	0	**$0**	
37	Loop Detector	$2,000.00	$2,000.00	EA	10	**$20,000**	
38	Remove Roadside Sign	-	$150.00	EA	0	**$0**	
39	Relocate Sign (1 post)	$220.00	$220.00	EA	28	**$6,160**	
40	Overhead Sign (2 posts)	$240,000.00	$240,000.00	EA	0	**$0**	
41	Relocate Bus Bench	$1,458.00	$1,458.00	EA	0	**$0**	
42	Install Ramp Metering System	$80,000.00	$80,000.00	EA	0	**$0**	
43	Install Delineator	$36.60	$36.60	EA	0	**$0**	
44	Apply ATMS	$113,165.00	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL					**$519,360**	
	UTILITIES AND DRAINAGE						
45	Relocate Call Box	$2,051.00	$2,051.00	EA	0	**$0**	
46	Relocate Power Pole	$25,000.00	$25,000.00	EA	0	**$0**	
47	Relocate Catch Basin	$9,760.00	$9,760.00	EA	3	**$29,280**	
48	Relocate Fire Hydrant	$5,000.00	$5,000.00	EA	4	**$20,000**	
49	Relocate Utility Boxes	$895.00	$1,000.00	EA	48	**$48,000**	
50	Relocate Main Water Valve	$12,200.00	$12,200.00	EA	0	**$0**	
51	Relocate Utility Vault	$10,000.00	$10,000.00	EA	2	**$20,000**	
52	Adjust Manhole to Grade	$1,500.00	$1,500.00	EA	3	**$4,500**	
53	Adjust Water Meter	$610.00	$1,000.00	EA	2	**$2,000**	
54	Adjust Water Valve	$610.00	$1,000.00	EA	2	**$2,000**	
55	Adjust Minor Above Ground Utilities	$610.00	$1,000.00	EA	0	**$0**	
56	Construct Striping & Marking	$2.00	$2.00	LF	0	**$0**	
57	Construct Storm Drain Main	$122.00	$122.00	LF	0	**$0**	
58	Construct RCB	$549.00	$549.00	CY	0	**$0**	
59	Construct Channel (Earthen)	$12.20	$12.20	LF	0	**$0**	
60	Construct Concrete V-Ditch	$19.00	$19.00	LF	0	**$0**	
61	Construct Bridge Widening	$500.00	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL					**$125,780**	
	GENERAL						
62	Mobilization	10.00%	$12,578	LS	1	**$245,681**	
63	Traffic Control	8% ($2,000 Min)	8%	LS	1	**$196,544**	
64	Utility Relocation	-	5%	LS	1	**$122,840.31**	
65	SWPPP Plan and Implementation	6%	6%	LS	1	**$147,408**	
	CONSTRUCTION SUBTOTAL					**$3,169,280**	
	RIGHT-OF-WAY						
66	Right-Of-Way	$65.00	$70.00	SF	3800	**$266,000**	Increase for 2016
67	Parking Impacts	$20,000.00	$20,000.00	EA	2	**$40,000**	
68	Temporary Construction Easements	$6.50	$6.50	SF	500	**$3,250**	
69	Right-of-Way Management	5%	10%	LS		**$30,925**	
	RIGHT-OF-WAY SUBTOTAL					**$340,175**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:						**$3,509,455**	
Preliminary Project Development (10% Construction Cost, min $200,000)						**$316,928**	
Design Engineering/Administration Cost (15% Construction Cost)						**$475,392**	
Construction Engineering Costs/Administration (15% Construction Cost)						**$475,392**	
Contingency (20% Construction Cost)						**$633,856**	
TOTAL PROJECT COSTS						**$5,411,023**	



LEGEND

(S) SIGNALIZED INTERSECTION

→ DIRECTION OF TRAVEL

PROPOSED ROW

XX' PROPOSED LANE WIDTH

MITIGATIONS - TUSTIN/IRVINE INTERSECTION 134

(1) ADD 3RD EBT AND NBR OVERLAP

TUSTIN/IRVINE INTERSECTION 134
WARNER AVE AT PARK AVE/LOOP RD
SHEET 1 OF 2

DECEMBER, 2016

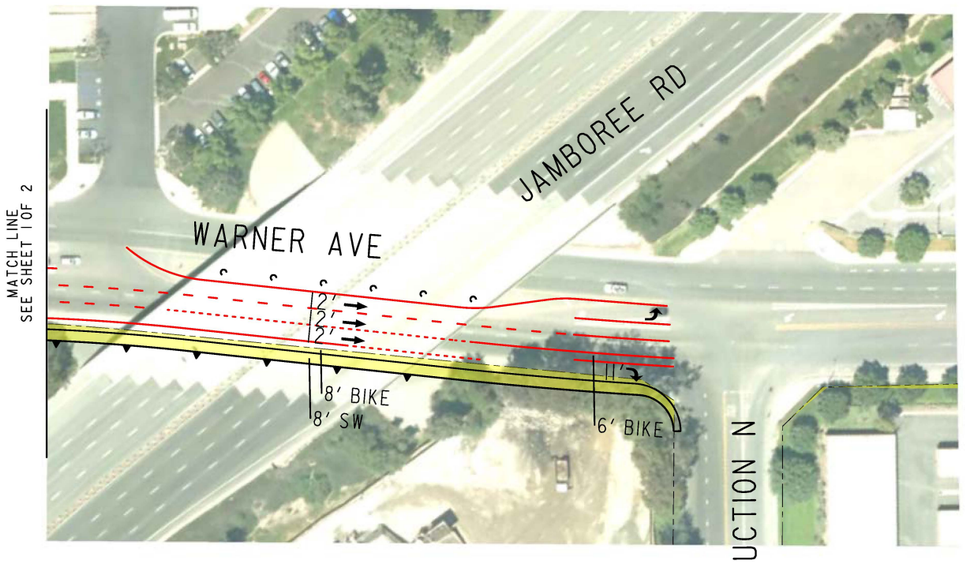
PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07



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TUSTIN/IRVINE INTERSECTION 134
WARNER AVE AT PARK AVE/LOOP RD
SHEET 2 OF 2

LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH
- PROPOSED RETAINING WALL

MITIGATIONS - TUSTIN/IRVINE INTERSECTION 134

(1) ADD 3RD EBT AND NBR OVERLAP

DECEMBER, 2016

PLAN PREPARED BY:

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07

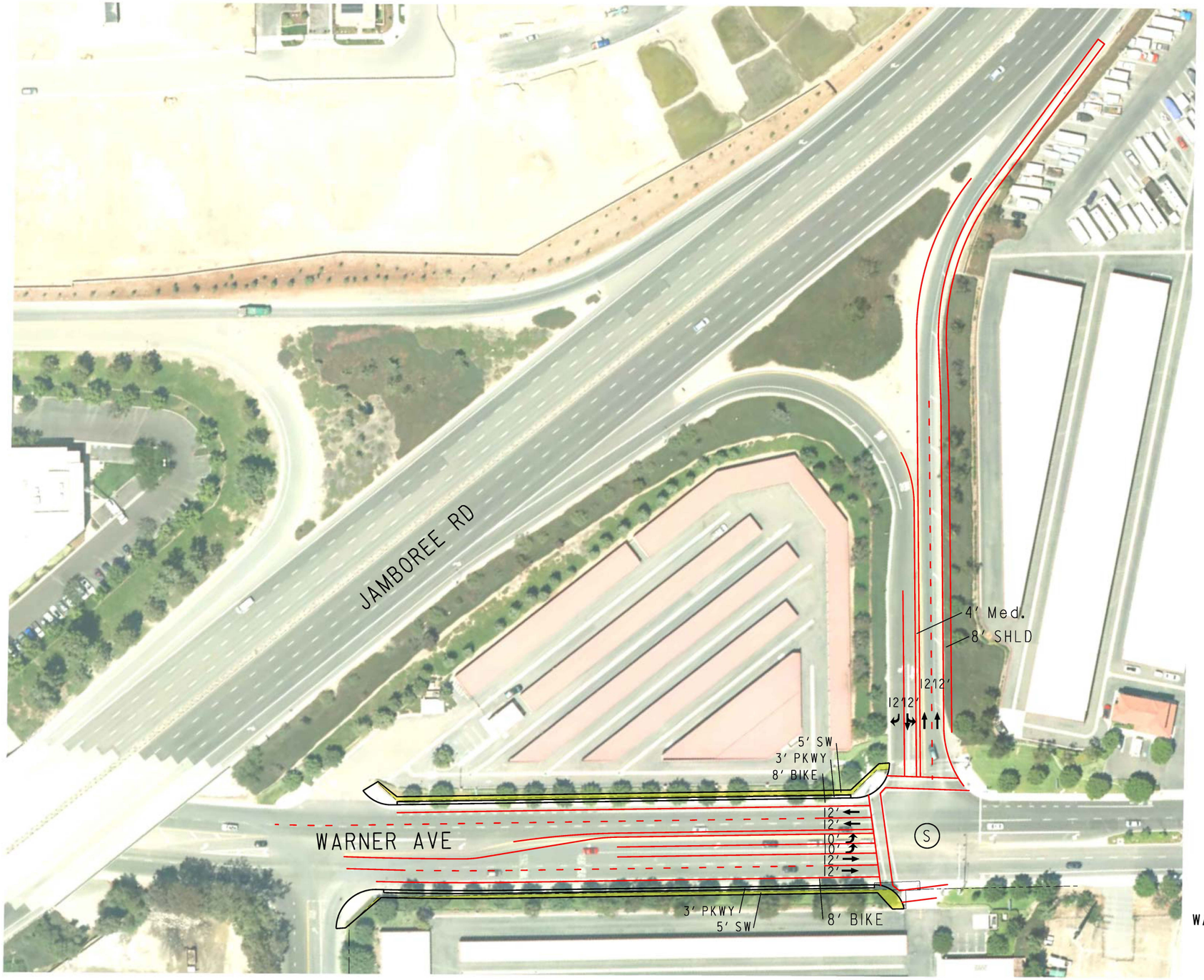
135 - Jamboree NB Ramps/Warner Avenue

Irvine IBC - Nexus Study

Cost Estimate

Intersection #135(a)
Warner Ave & Jamboree Rd
Mitigations: Add 2nd EBL

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.18	**$2,199**	
2	Earthwork	$46.00	CY	2800	**$128,800**	
3	Remove Curb & Gutter	$24.00	LF	1700	**$40,800**	
4	Remove Median Curb	$30.00	LF	0	**$0**	
5	Remove PCC Sidewalk	$5.00	SF	5500	**$27,500**	
6	Remove Pavement	$5.00	SF	9600	**$48,000**	
7	Remove Channel	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF	0	**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
10	Remove & Replace Tree	$1,500.00	EA	30	**$45,000**	
11	Modify Driveway	$6,100.00	EA	1	**$6,100**	
12	Construct PCC Pavement	$14.00	SF	0	**$0**	
13	Construct AC Pavement	$8.00	SF	14500	**$116,000**	
14	Construct AC Overlay	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	SF	0	**$0**	
16	Construct AC Dike	$15.00	LF	0	**$0**	
17	Construct Curb & Gutter	$30.00	LF	1700	**$51,000**	
18	Construct Concrete Barrier	$80.00	LF	0	**$0**	
19	Construct Median Curb	$31.00	LF	0	**$0**	
20	Construct Median Concrete	$15.00	SF	0	**$0**	
21	Construct Median/Parkway Landscaping	$13.00	SF	6500	**$84,500**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	SF	5500	**$49,775**	
23	Construct Wheelchair Ramp	$6,000.00	EA	4	**$24,000**	
24	Construct Retaining Wall	$75.00	SF	0	**$0**	assume 4'(6'H) x 300 LF wall at toe.
25	Remove Retaining Wall	$35.00	SF	0	**$0**	
26	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
27	Sawcut	$4.00	LF	1750	**$7,000**	
	ROADWAY SUBTOTAL				**$630,674**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	4000	**$12,000**	
29	Remove Pavement Markings	$150.00	EA	11	**$1,650**	
30	Relocate Street Light	$6,200.00	EA	2	**$12,400**	Along On-Ramp - Protect Street Lights along Warner (except on Sig Poles)
31	Modify Traffic Signal	$325,000.00	EA	1	**$325,000**	two corners modified
32	New Traffic Signal	$425,000.00	EA	0	**$0**	
33	Install Striping	$5.00	LF	6500	**$32,500**	
34	Install Pavement Markings	$350.00	EA	14	**$4,900**	
35	Relocate Freeway Sign (2 post)	$700.00	EA	1	**$700**	
36	Loop Detector	$2,000.00	EA	0	**$0**	video detection
37	Remove Roadside Sign	$150.00	EA	0	**$0**	
38	Relocate Sign (1 post)	$220.00	EA	7	**$1,540**	
39	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
40	Relocate Bus Bench	$1,458.00	EA	0	**$0**	
41	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
42	Install Delineator	$36.60	EA	0	**$0**	
43	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$390,690**	
	UTILITIES AND DRAINAGE					
44	Relocate Call Box	$2,051.00	EA	0	**$0**	
45	Relocate Power Pole	$25,000.00	EA	0	**$0**	
46	Relocate Catch Basin	$9,760.00	EA	3	**$29,280**	
47	Relocate Fire Hydrant	$5,000.00	EA	2	**$10,000**	
48	Relocate Utility Boxes	$1,000.00	EA	2	**$2,000**	
49	Relocate Main Water Valve	$12,200.00	EA	0	**$0**	
50	Relocate Utility Vault	$10,000.00	EA	0	**$0**	
51	Adjust Manhole to Grade	$1,500.00	EA	1	**$1,500**	
52	Adjust Water Meter	$1,000.00	EA	2	**$2,000**	
53	Adjust Water Valve	$1,000.00	EA	10	**$10,000**	
54	Adjust Minor Above Ground Utilities	$1,000.00	EA	1	**$1,000**	Area Drain
55	Construct Striping & Marking	$2.00	LF	0	**$0**	
56	Construct Storm Drain Main	$122.00	LF	0	**$0**	
57	Construct RCB	$549.00	CY	0	**$0**	
58	Construct Channel (Earthen)	$12.20	LF	0	**$0**	
59	Construct Concrete V-Ditch	$19.00	LF	0	**$0**	
60	Construct Bridge Widening	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$55,780**	
	GENERAL					
61	Mobilization	$5,578	LS	1	**$107,714**	
62	Traffic Control	8%	LS	1	**$86,171**	
63	Utility Relocations	5%	LS	1	**$53,857**	
64	SWPPP Plan and Implementation	6%	LS	1	**$64,629**	
	CONSTRUCTION SUBTOTAL				**$1,389,515**	
	RIGHT-OF-WAY					
65	Right-Of-Way	$70.00	SF	2200	**$154,000**	
66	Parking Impacts	$20,000.00	EA	0	**$0**	
67	Temporary Construction Easements	$6.50	SF	5500	**$35,750**	
68	Right-of-Way Management	10%	LS	0	**$18,975**	
	RIGHT-OF-WAY SUBTOTAL				**$208,725**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$1,598,240**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$208,427**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$208,427**	
Contingency (20% Construction Cost)					**$277,903**	
TOTAL PROJECT COSTS					**$2,592,998**	



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LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

IRVINE INTERSECTION 135(a)

WARNER AVE AT JAMBOREE RD RAMPS

SHEET 1 OF 1

MITIGATIONS - IRVINE INTERSECTION 135(a)

(1) ADD SECOND EB LEFT-TURN LANE

DECEMBER, 2016

PLAN PREPARED BY:

HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07

Irvine IBC - Nexus Study

Cost Estimate

Intersection 135(b)
Jamboree Rd & Warner Ave
Mitigations: Construct roundabout

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.16	**$2,007**	
2	Earthwork	$46.00	CY	1333	**$61,318**	
3	Remove Curb & Gutter	$24.00	LF	400	**$9,600**	
4	Remove Median Curb	$30.00	LF	380	**$11,400**	
5	Remove PCC Sidewalk	$5.00	SF	2400	**$12,000**	
6	Remove Pavement	$5.00	SF	32000	**$160,000**	
7	Remove Channel	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF	0	**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
10	Remove & Replace Tree	$1,500.00	EA	25	**$37,500**	
11	Modify Driveway	$6,100.00	EA		**$0**	
12	Construct PCC Pavement	$14.00	SF	0	**$0**	
13	Construct AC Pavement	$8.00	SF	39900	**$319,200**	
14	Construct AC Overlay	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	SF	0	**$0**	
16	Construct AC Dike	$15.00	LF	0	**$0**	
17	Construct Curb & Gutter	$30.00	LF	450	**$13,500**	
18	Construct Concrete Barrier	$80.00	LF	0	**$0**	
19	Construct Median Curb	$31.00	LF	1050	**$32,550**	
20	Construct Median Concrete	$15.00	SF	220	**$3,300**	
21	Construct Median/Parkway Landscaping	$13.00	SF	5090	**$66,170**	
22	Construct PCC Sidewalk	$9.05	SF	2200	**$19,910**	
23	Construct Wheelchair Ramp	$6,000.00	EA	8	**$48,000**	
24	Construct Retaining Wall	$75.00	SF	0	**$0**	
25	Remove Retaining Wall	$35.00	SF	0	**$0**	
26	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
27	Sawcut	$4.00	LF	200	**$800**	
	ROADWAY SUBTOTAL				**$797,255**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	2500	**$7,500**	
29	Remove Pavement Markings	$150.00	EA	5	**$750**	
30	Relocate Street Light	$6,200.00	EA	5	**$31,000**	
31	Modify Traffic Signal	$325,000.00	EA	0	**$0**	
32	New Traffic Signal	$425,000.00	EA	0	**$0**	
33	Install Striping	$5.00	LF	2200	**$11,000**	
34	Install Pavement Markings	$350.00	EA	10	**$3,500**	
35	Relocate Freeway Sign (2 post)	$700.00	EA	0	**$0**	
36	Loop Detector	$2,000.00	EA	0	**$0**	
37	Remove Roadside Sign	$150.00	EA	5	**$750**	
38	Relocate Sign (1 post)	$220.00	EA	5	**$1,100**	
39	Install New Sign (1 post)	$280.00	EA	30	**$8,400**	
40	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
41	Remove Traffic Signal	$80,000.00	EA	1	**$80,000**	
42	Relocate Bus Bench	$1,458.00	EA	0	**$0**	
43	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
44	Install Delineator	$36.60	EA	0	**$0**	
45	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$144,000**	
	UTILITIES AND DRAINAGE					
46	Relocate Call Box	$2,051.00	EA		**$0**	
47	Relocate Power Pole	$25,000.00	EA		**$0**	
48	Relocate Catch Basin	$9,760.00	EA	3	**$29,280**	
49	Relocate Fire Hydrant	$5,000.00	EA		**$0**	
50	Relocate Utility Boxes	$1,000.00	EA	10	**$10,000**	
51	Relocate Main Water Valve	$12,200.00	EA		**$0**	
52	Relocate Utility Vault	$10,000.00	EA	2	**$20,000**	
53	Adjust Manhole to Grade	$1,500.00	EA	5	**$7,500**	
54	Adjust Water Meter	$1,000.00	EA	2	**$2,000**	
55	Adjust Water Valve	$1,000.00	EA	1	**$1,000**	
56	Adjust Minor Above Ground Utilities	$1,000.00	EA	2	**$2,000**	
57	Construct Striping & Marking	$2.00	LF		**$0**	
58	Construct Storm Drain Main	$122.00	LF		**$0**	
59	Construct RCB	$549.00	CY		**$0**	
60	Construct Channel (Earthen)	$12.20	LF		**$0**	
61	Construct Concrete V-Ditch	$19.00	LF		**$0**	
62	Construct Bridge Widening	$500.00	SF		**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$71,780**	
	GENERAL					
63	Mobilization	$7,178	LS	1	**$101,303**	
64	Traffic Control	8%	LS	1	**$81,043**	
65	Utility Relocations	5%	LS	1	**$50,651.73**	
66	SWPPP Plan and Implementation	6%	LS	1	**$60,782**	
	CONSTRUCTION SUBTOTAL				**$1,306,815**	
	RIGHT-OF-WAY					
67	Right-Of-Way	$70.00	SF	19100	**$1,337,000**	
68	Building Modifications	-	LS	1	**$300,000**	
69	Parking Impacts	$20,000.00	EA	5	**$100,000**	
70	Temporary Construction Easements	$6.50	SF	1000	**$6,500**	
71	Right-of-Way Management	10%	LS	1	**$144,350**	
	RIGHT-OF-WAY SUBTOTAL				**$1,887,850**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$3,194,665**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$196,022**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$196,022**	
Contingency (20% Construction Cost)					**$261,363**	
TOTAL PROJECT COSTS					**$4,148,072**	

Note: This was an alternative improvement considered, but costs were not included in fees



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LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION 135(b)

(1) ROUNDABOUT AT WARNER & JAMBOREE RD

IRVINE INTERSECTION 135(b)
WARNER AVE AT JAMBOREE RD RAMPS
SHEET 1 OF 1

DECEMBER, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07

188 - Harvard Avenue at Michelson Drive

Irvine IBC - Nexus Study

Cost Estimate

Intersection #188
Harvard Ave & Michelson Street
Mitigations: Widen SB TO 2,2,1 configuration

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	1.452	**$17,714**	
2	Earthwork	$46.00	CY	4000	**$184,000**	
3	Remove Curb & Gutter	$24.00	LF	650	**$15,600**	
4	Remove Median Curb	$30.00	LF	0	**$0**	
5	Remove PCC Sidewalk	$5.00	SF	3200	**$16,000**	
6	Remove Pavement	$5.00	SF	0	**$0**	
7	Remove Channel	$40.00	LF		**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF		**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF		**$0**	
10	Remove & Replace Tree	$1,500.00	EA	4	**$6,000**	
11	Modify Driveway	$6,100.00	EA		**$0**	
12	Construct PCC Pavement	$14.00	SF		**$0**	
13	Construct AC Pavement	$8.00	SF	8000	**$64,000**	
14	Construct AC Overlay	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	SF	0	**$0**	
16	Construct AC Dike	$15.00	LF	0	**$0**	
17	Construct Curb & Gutter	$30.00	LF	650	**$19,500**	
18	Construct Concrete Barrier	$80.00	LF		**$0**	
19	Construct Median Curb	$31.00	LF	0	**$0**	
20	Construct Median Concrete	$15.00	SF	0	**$0**	
21	Construct Median/Parkway Landscaping	$13.00	SF	25000	**$325,000**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	SF	3250	**$29,413**	
23	Construct Wheelchair Ramp	$6,000.00	EA	1	**$6,000**	
24	Construct Retaining Wall	$75.00	SF	1800	**$135,000**	assume 4'(6'H) x 300 LF wall at toe.
25	Remove Retaining Wall	$35.00	SF		**$0**	
26	Relocate Monument Wall	$20,000.00	EA		**$0**	
27	Sawcut	$4.00	LF	650	**$2,600**	
	ROADWAY SUBTOTAL				**$820,827**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	3000	**$9,000**	
29	Remove Pavement Markings	$150.00	EA	8	**$1,200**	
30	Relocate Street Light	$6,200.00	EA	2	**$12,400**	
31	Modify Traffic Signal	$325,000.00	EA	1	**$325,000**	
32	New Traffic Signal	$425,000.00	EA	0	**$0**	
33	Install Striping	$5.00	LF	3500	**$17,500**	
34	Install Pavement Markings	$350.00	EA	10	**$3,500**	
35	Relocate Freeway Sign (2 post)	$700.00	EA		**$0**	
36	Loop Detector	$2,000.00	EA	15	**$30,000**	
37	Remove Roadside Sign	$150.00	EA	5	**$750**	
38	Relocate Sign (1 post)	$220.00	EA	5	**$1,100**	
39	Overhead Sign (2 posts)	$240,000.00	EA		**$0**	
40	Relocate Bus Bench	$1,458.00	EA	0	**$0**	
41	Install Ramp Metering System	$80,000.00	EA		**$0**	
42	Install Delineator	$36.60	EA	0	**$0**	
43	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$400,450**	
	UTILITIES AND DRAINAGE					
44	Relocate Call Box	$2,051.00	EA		**$0**	
45	Relocate Power Pole	$25,000.00	EA		**$0**	
46	Relocate Catch Basin	$9,760.00	EA	1	**$9,760**	
47	Relocate Fire Hydrant	$5,000.00	EA		**$0**	
48	Relocate Utility Boxes	$1,000.00	EA		**$0**	
49	Relocate Main Water Valve	$12,200.00	EA		**$0**	
50	Relocate Utility Vault	$10,000.00	EA	3	**$30,000**	1 small & 1 Huge; assume 3
51	Adjust Manhole to Grade	$1,500.00	EA		**$0**	
52	Adjust Water Meter	$1,000.00	EA		**$0**	
53	Adjust Water Valve	$1,000.00	EA		**$0**	
54	Adjust Minor Above Ground Utilities	$1,000.00	EA	1	**$1,000**	Area Drain
55	Construct Striping & Marking	$2.00	LF		**$0**	
56	Construct Storm Drain Main	$122.00	LF		**$0**	
57	Construct RCB	$549.00	CY		**$0**	
58	Construct Channel (Earthen)	$12.20	LF		**$0**	
59	Construct Concrete V-Ditch	$19.00	LF		**$0**	
60	Construct Bridge Widening	$500.00	SF		**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$40,760**	
	GENERAL					
61	Mobilization	10%	LS	1	**$126,204**	
62	Traffic Control	8%	LS	1	**$100,963**	
63	Utility Relocation	5%	LS	1	**$63,102**	
64	SWPPP Plan and Implementation	6%	LS	1	**$75,722**	
	CONSTRUCTION SUBTOTAL				**$1,628,028**	
	RIGHT-OF-WAY					
65	Right-Of-Way	$70.00	SF	0	**$0**	
66	Parking Impacts	$20,000.00	EA	0	**$0**	
67	Temporary Construction Easements	$6.50	SF	1500	**$9,750**	
68	Right-of-Way Management	10%	LS	1	**$975**	
	RIGHT-OF-WAY SUBTOTAL				**$10,725**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$1,638,753**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$244,204**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$244,204**	
Contingency (20% Construction Cost)					**$325,606**	
TOTAL PROJECT COSTS					**$2,752,766**	



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION 188

(1) WIDEN SB TO 2, 2, 1 CONFIGURATION

IRVINE INTERSECTION 188
HARVARD DR & MICHELSON DR
SHEET 1 OF 1

DECEMBER, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

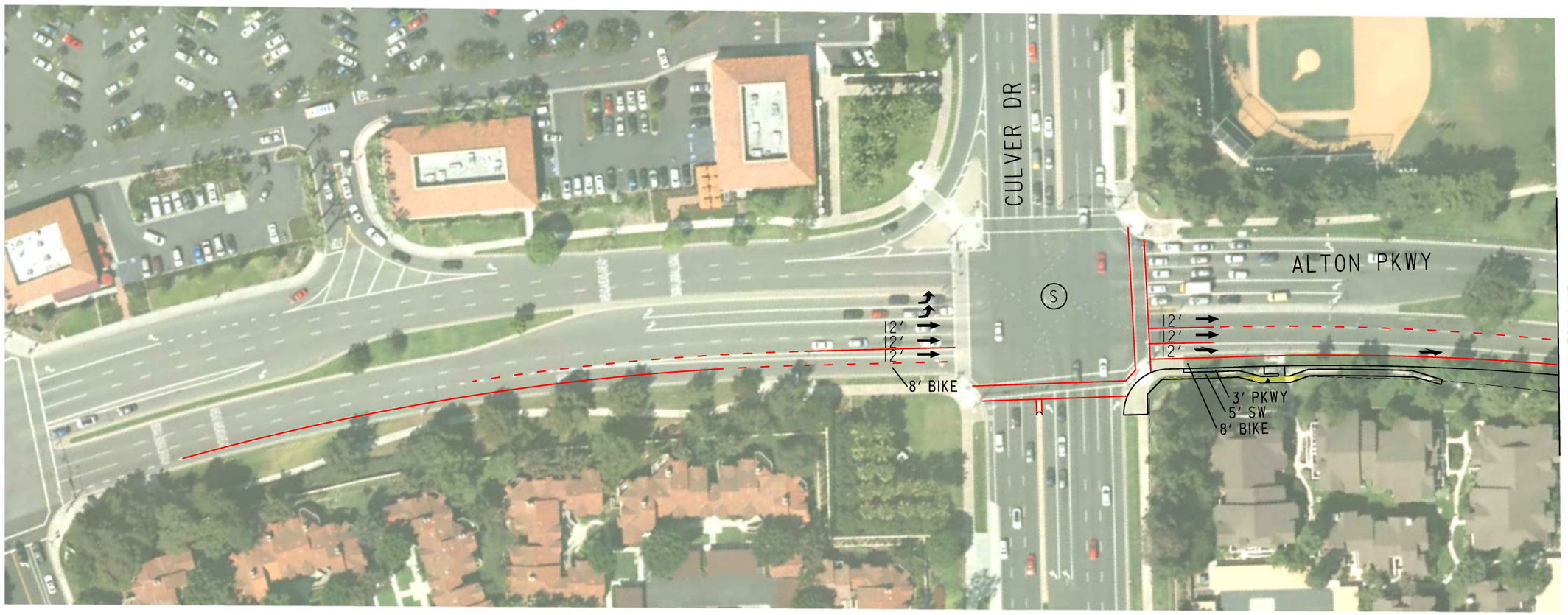
229 - Culver Drive at Alton Parkway

Irvine IBC - Nexus Study

Cost Estimate

Intersection #229
Culver Drive & Alton Parkway
Mitigations: Widen EB to 2, 3, defacto RT

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.18	$2,196	
2	Earthwork	$46.00	CY	1612	$74,152	
3	Remove Curb & Gutter	$24.00	LF	800	$19,200	
4	Remove Median Curb	$30.00	LF	29	$870	
5	Remove PCC Sidewalk	$5.00	SF	3639	$18,195	
6	Remove Pavement	$5.00	SF	1542	$7,710	
7	Remove Channel	$40.00	LF		$0	
8	Remove/Replace Chain Link Fence	$35.00	LF		$0	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF		$0	
10	Remove & Replace Tree	$1,500.00	EA	15	$22,500	
11	Modify Driveway	$6,100.00	EA		$0	
12	Construct PCC Pavement	$14.00	SF		$0	
13	Construct AC Pavement	$8.00	SF	7490	$59,920	
14	Construct AC Overlay	$3.60	SF		$0	
15	Construct Slurry Seal	$0.40	SF		$0	
16	Construct AC Dike	$15.00	LF		$0	
17	Construct Curb & Gutter	$30.00	LF	751	$22,530	
18	Construct Concrete Barrier	$80.00	LF		$0	
19	Construct Median Curb	$31.00	LF	7	$217	
20	Construct Median Concrete	$15.00	SF	5	$75	
21	Construct Median/Parkway Landscaping	$13.00	SF	1949	$25,337	
22	Construct PCC Sidewalk	$9.05	SF	3437	$31,105	
23	Construct ADA Compliant Curb Ramp	$6,000.00	EA	1	$6,000	
24	Construct Retaining Wall	$75.00	SF	100	$7,500	
25	Remove Retaining Wall	$35.00	SF		$0	
26	Relocate Monument Wall	$20,000.00	EA		$0	
27	Sawcut	$4.00	LF	783	$3,132	
	ROADWAY SUBTOTAL				$300,639	
	TRAFFIC					
28	Remove Striping	$3.00	LF	2824	$8,472	
29	Remove Pavement Markings	$150.00	EA	5	$750	
30	Relocate Street Light	$6,200.00	EA		$0	
31	Modify Traffic Signal	$325,000.00	EA	0.25	$81,250	
32	New Traffic Signal	$425,000.00	EA		$0	
33	Install Striping	$5.00	LF	3021	$15,105	
34	Install Pavement Markings	$350.00	EA	8	$2,800	
35	Relocate Freeway Sign (2 post)	$700.00	EA		$0	
36	Loop Detector	$2000.00	EA	8	$16,000	
37	Remove Roadside Sign	$150.00	EA	1	$150	
38	Relocate Sign (1 post)	$220.00	EA	4	$880	
39	Overhead Sign (2 posts)	$240,000.00	EA		$0	
40	Relocate Bus Bench	$1,458.00	EA	1	$1,458	
41	Install Ramp Metering System	$80,000.00	EA		$0	
42	Install Delineator	$36.60	EA		$0	
43	Apply ATMS	$113,165.00	LS		$0	
	TRAFFIC SUBTOTAL				$126,865	
	UTILITIES AND DRAINAGE					
44	Relocate Call Box	$2,051.00	EA		$0	
45	Relocate Power Pole	$25,000.00	EA		$0	
46	Relocate Catch Basin	$9,760.00	EA	1	$9,760	
47	Relocate Fire Hydrant	$5,000.00	EA		$0	
48	Relocate Utility Boxes	$1000.00	EA	18	$18,000	
49	Relocate Main Water Valve	$12,200.00	EA		$0	
50	Relocate Utility Vault	$10,000.00	EA		$0	
51	Adjust Manhole to Grade	$1,500.00	EA		$0	
52	Adjust Water Meter	$1000.00	EA		$0	
53	Adjust Water Valve	$1000.00	EA		$0	
54	Adjust Minor Above Ground Utilities	$1000.00	EA		$0	
55	Construct Storm Drain Main	$122.00	LF		$0	
56	Construct RCB	$549.00	CY		$0	
57	Construct Channel (Earthen)	$12.20	LF		$0	
58	Construct Concrete V-Ditch	$19.00	LF		$0	
59	Construct Bridge Widening	$500.00	SF		$0	
	UTILITIES AND DRAINAGE SUBTOTAL				$27,760	
	GENERAL					
60	Mobilization	$3,776	LS	1	$45,526	
61	Traffic Control	8%	LS	1	$36,421	
62	Utility Relocation	5%	LS	1	$22,763	
63	SWPPP Plan and Implementation	6%	LS	1	$27,316	
	CONSTRUCTION SUBTOTAL				$587,290	
	RIGHT-OF-WAY					
64	Right-Of-Way	$70.00	SF	286	$20,020	
65	Parking Impacts	$20,000.00	EA		$0	
66	Temporary Construction Easements	$6.50	SF	150	$975	
67	Right-of-Way Management	10%	LS	1	$2,100	
	RIGHT-OF-WAY SUBTOTAL				$23,095	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					$610,385	
Preliminary Project Development (10% Construction Cost, min $300,000)					$300,000	
Design Engineering/Administration Cost (15% Construction Cost)					$88,094	
Construction Engineering Costs/Administration (15% Construction Cost)					$88,094	
Contingency (20% Construction Cost)					$117,458	
TOTAL PROJECT COSTS					$1,204,030	



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX′ PROPOSED LANE WIDTH
- PROPOSED RETAINING WALL

MITIGATIONS - IRVINE INTERSECTION 229

(1) WIDEN EB TO 2, 3, DEFACTO RT

IRVINE INTERSECTION 229
CULVER DR & ALTON PKWY
SHEET 1 OF 2

DECEMBER, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION 229

- (1) WIDEN EB TO 2, 3, DEFACTO RT

IRVINE INTERSECTION 229
CULVER DR & ALTON PKWY
SHEET 2 OF 2

DECEMBER, 2016

PLAN PREPARED BY:

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

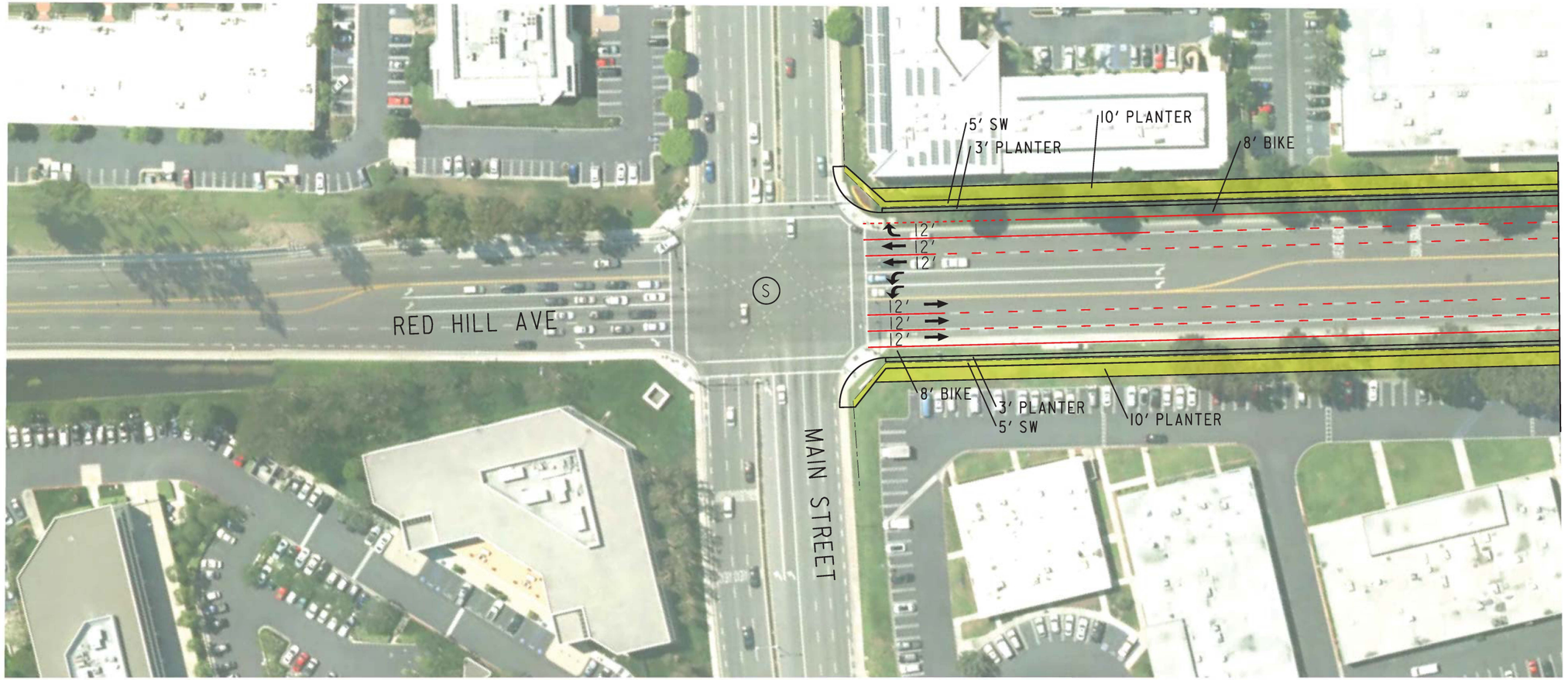
Red Hill Avenue between Main Street and MacArthur Boulevard

Irvine IBC - Nexus Study

Cost Estimate

Arterial
Red Hill Ave From Main St to MacArthur Blvd
Mitigations: Widen Red Hill from 4 lanes to 6 lanes between Main St and MacArthur Blvd

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	3.56	**$43,467**	
2	Earthwork	$46.00	CY	6798	**$312,705**	
3	Remove Curb & Gutter	$24.00	LF	4850	**$116,400**	
4	Remove Median Curb	$30.00	LF	35	**$1,050**	
5	Remove PCC Sidewalk	$5.00	SF	19416	**$97,080**	
6	Remove Pavement	$5.00	SF	7275	**$36,375**	
7	Remove Channel	$40.00	LF		**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF		**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF		**$0**	
10	Remove & Replace Tree	$1,500.00	EA	45	**$67,500**	
11	Modify Driveway	$6,100.00	EA	6	**$36,600**	
12	Construct PCC Pavement	$14.00	SF		**$0**	
13	Construct AC Pavement	$8.00	SF	88600	**$708,800**	
14	Construct AC Overlay	$3.60	SF		**$0**	
15	Construct Slurry Seal	$0.40	SF		**$0**	
16	Construct AC Dike	$15.00	LF		**$0**	
17	Construct Curb & Gutter	$30.00	LF	4850	**$145,500**	
18	Construct Concrete Barrier	$80.00	LF		**$0**	
19	Construct Median Curb	$31.00	LF	30	**$930**	
20	Construct Median Concrete	$15.00	SF	262	**$3,930**	
21	Construct Median/Parkway Landscaping	$13.00	SF	88000	**$1,144,000**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	SF	48500	**$438,925**	
23	Construct Wheelchair Ramp	$6,000.00	EA	9	**$54,000**	
24	Construct Retaining Wall	$75.00	SF	9700	**$727,500**	Average height 2' wall along entire length
25	Remove Retaining Wall	$35.00	SF		**$0**	
26	Relocate Monument Sign	$5,000.00	EA	3	**$15,000**	
27	Sawcut	$4.00	LF	4850	**$19,400**	
	ROADWAY SUBTOTAL				**$3,969,162**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	25000	**$75,000**	
29	Remove Pavement Markings	$150.00	EA	28	**$4,200**	
30	Relocate Street Light	$6,200.00	EA	10	**$62,000**	
31	Modify Traffic Signal	$325,000.00	EA	2	**$650,000**	Sky Park N, Main St
32	New Traffic Signal	$425,000.00	EA		**$0**	
33	Install Striping	$5.00	LF	30300	**$151,500**	
34	Install Pavement Markings	$350.00	EA	32	**$11,200**	
35	Relocate Freeway Sign (2 post)	$700.00	EA		**$0**	
36	Loop Detector	$2,000.00	EA	6	**$12,000**	video detection
37	Remove Roadside Sign	$150.00	EA		**$0**	
38	Relocate Sign (1 post)	$220.00	EA	35	**$7,700**	
39	Overhead Sign (2 posts)	$240,000.00	EA		**$0**	
40	Relocate Bus Bench	$1,458.00	EA	2	**$2,916**	
41	Install Ramp Metering System	$80,000.00	EA		**$0**	
42	Install Delineator	$36.60	EA		**$0**	
43	Apply ATMS	$113,165.00	LS		**$0**	
	TRAFFIC SUBTOTAL				**$976,516**	
	UTILITIES AND DRAINAGE					
44	Relocate Call Box	$2,051.00	EA		**$0**	
45	Relocate Power Pole	$25,000.00	EA	14	**$350,000**	
46	Relocate High Voltage Power Pole	$100,000.00	EA	1	**$100,000**	At Mitchell S
47	Relocate Catch Basin	$9,760.00	EA	2	**$19,520**	
48	Relocate Fire Hydrant	$5,000.00	EA	5	**$25,000**	
49	Relocate Utility Boxes	$1,000.00	EA	32	**$32,000**	
50	Relocate Main Water Valve	$12,200.00	EA		**$0**	
51	Relocate Utility Vault	$10,000.00	EA	2	**$20,000**	
52	Adjust Manhole to Grade	$1,500.00	EA		**$0**	
53	Adjust Water Meter	$1,000.00	EA	3	**$3,000**	
54	Adjust Water Valve	$1,000.00	EA		**$0**	
55	Adjust Minor Above Ground Utilities	$1,000.00	EA		**$0**	
56	Construct Striping & Marking	$2.00	LF		**$0**	
57	Construct Storm Drain Main	$122.00	LF		**$0**	
58	Construct RCB	$549.00	CY		**$0**	
59	Construct Channel (Earthen)	$12.20	LF		**$0**	
60	Construct Concrete V-Ditch	$19.00	LF		**$0**	
61	Construct Bridge Widening	$500.00	SF		**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$549,520**	
	GENERAL					
62	Mobilization	$54,952	LS	1	**$549,520**	
63	Traffic Control	8%	LS	1	**$439,616**	
64	Utility Relocation	5%	LS	1	**$274,760**	
65	SWPPP Plan and Implementation	6%	LS	1	**$329,712**	
	CONSTRUCTION SUBTOTAL				**$7,088,805**	
	RIGHT-OF-WAY					
66	Right-Of-Way	$70.00	SF	90313	**$6,321,910**	
67	Parking Impacts	$20,000.00	EA	3	**$60,000**	
68	Temporary Construction Easements	$6.50	SF	8000	**$52,000**	
69	Right-of-Way Management	10%	LS		**$643,391**	
	RIGHT-OF-WAY SUBTOTAL				**$7,077,301**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$14,166,106**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$708,881**	
Design Engineering/Administration Cost (15% Construction Cost)					**$1,063,321**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$1,063,321**	
Contingency (20% Construction Cost)					**$1,417,761**	
TOTAL PROJECT COSTS					**$18,419,390**	



IRVINE INTERSECTION
RED HILL AVE FROM MAIN ST TO MACARTHUR BLVD
SHEET 1 OF 4

LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION

(1) WIDEN RED HILL AVE FROM 4-LANES TO 6-LANES BETWEEN MAIN STREET AND MACARTHUR BLVD

DECEMBER, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION

(1) WIDEN RED HILL AVE FROM 4-LANES TO 6-LANES BETWEEN MAIN STREET AND MACARTHUR BLVD

IRVINE INTERSECTION
RED HILL AVE FROM MAIN ST TO MACARTHUR BLVD
SHEET 2 OF 4

DECEMBER, 2016

PLAN PREPARED BY:

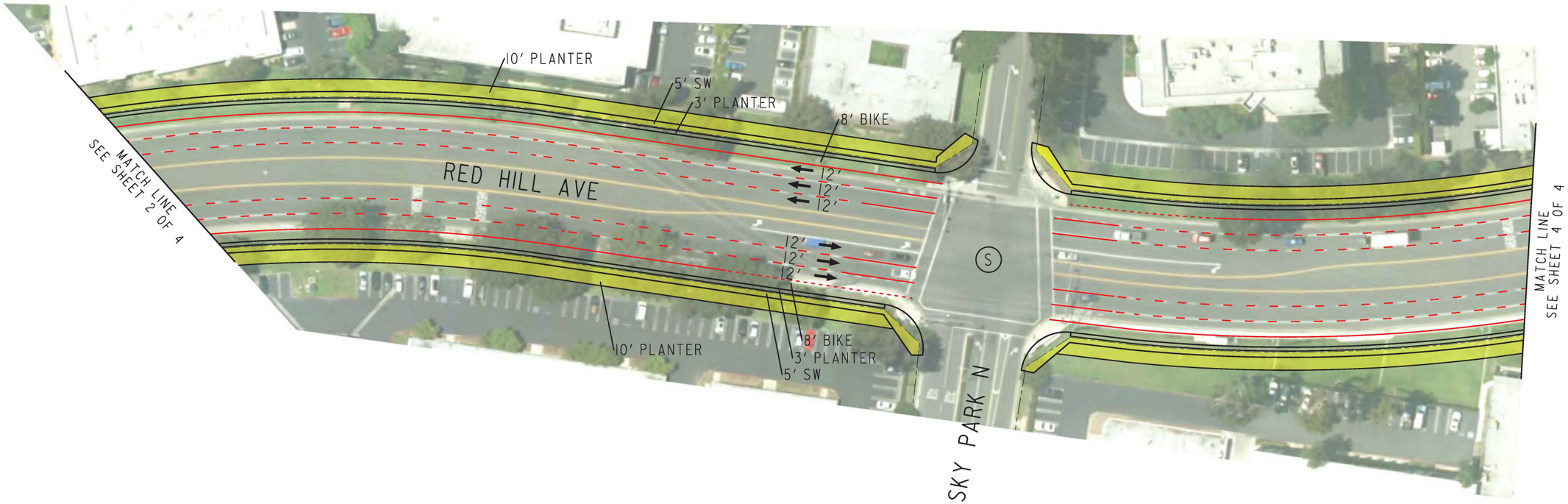
HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION

(1) WIDEN RED HILL AVE FROM 4-LANES TO 6-LANES BETWEEN MAIN STREET AND MACARTHUR BLVD

IRVINE INTERSECTION
RED HILL AVE FROM MAIN ST TO MACARTHUR BLVD
SHEET 3 OF 4

DECEMBER, 2016

PLAN PREPARED BY:

HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



IRVINE INTERSECTION
RED HILL AVE FROM MAIN ST TO MACARTHUR BLVD
SHEET 4 OF 4

LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION

(1) WIDEN RED HILL AVE FROM 4-LANES TO 6-LANES BETWEEN MAIN STREET AND MACARTHUR BLVD

DECEMBER, 2016

PLAN PREPARED BY:

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

Gillete Avenue and Alton Parkway

Irvine IBC - Nexus Study

Cost Estimate

Gillette & Alton
Mitigations: New Traffic Signal (3-leg intersection)

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC		**$0**	
2	Earthwork	$46.00	CY		**$0**	
3	Remove Curb & Gutter	$24.00	LF		**$0**	
4	Remove Median Curb	$30.00	LF		**$0**	
5	Remove PCC Sidewalk	$5.00	SF		**$0**	
6	Remove Pavement	$5.00	SF		**$0**	
7	Remove Channel	$40.00	LF		**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF		**$0**	
9	Remove and Replace Pedestal and Wrought Iron Fence	$75.00	LF		**$0**	
10	Remove and Replace Vinyl Fence	$40.00	LF		**$0**	
11	Reconstruct Metal Beam Guard Rail	$40.00	LF		**$0**	
12	Remove & Replace Tree	$1,500.00	EA		**$0**	
13	Modify Driveway	$6,100.00	EA		**$0**	
14	Construct PCC Pavement	$14.00	SF		**$0**	
15	Construct AC Pavement	$8.00	SF		**$0**	
16	Construct AC Overlay	$3.60	SF		**$0**	
17	Construct Slurry Seal	$0.40	SF		**$0**	
18	Construct AC Dike	$15.00	LF		**$0**	
19	Construct Curb & Gutter	$30.00	LF		**$0**	
20	Construct Concrete Barrier	$80.00	LF		**$0**	
21	Construct Median Curb	$31.00	LF		**$0**	
22	Construct Median Concrete	$15.00	SF		**$0**	
23	Construct Median/Parkway Landscaping	$13.00	SF		**$0**	
24	Construct PCC Sidewalk	$9.05	SF		**$0**	
25	Construct Wheelchair Ramp	$6,000.00	EA		**$0**	
26	Construct Retaining Wall	$75.00	SF		**$0**	
27	Remove Retaining Wall	$35.00	SF		**$0**	
28	Relocate Monument Wall	$20,000.00	EA		**$0**	
29	Sawcut	$4.00	LF		**$0**	
	ROADWAY SUBTOTAL				**$0**	
	TRAFFIC					
30	Remove Striping	$3.00	LF		**$0**	
31	Remove Pavement Markings	$150.00	EA		**$0**	
32	Relocate Street Light	$6,200.00	EA		**$0**	
33	Modify Traffic Signal	$325,000.00	EA		**$0**	
34	New Traffic Signal	$265,000.00	EA	1	**$350,000**	Small, 3-leg intersection
35	Install Striping	$5.00	LF		**$0**	
36	Install Pavement Markings	$350.00	EA		**$0**	
37	Relocate Freeway Sign (2 post)	$700.00	EA		**$0**	
38	Loop Detector	$2,000.00	EA		**$0**	
39	Remove Roadside Sign	$150.00	EA		**$0**	
40	Relocate Sign (1 post)	$220.00	EA		**$0**	
41	Overhead Sign (2 posts)	$240,000.00	EA		**$0**	
42	Relocate Bus Bench	$1,458.00	EA		**$0**	
43	Relocate Automatic Gate	$10,000.00	EA		**$0**	
44	Install Ramp Metering System	$80,000.00	EA		**$0**	
45	Install Delineator	$36.60	EA		**$0**	
46	Apply ATMS	$113,165.00	LS		**$0**	
	TRAFFIC SUBTOTAL				**$350,000**	
	UTILITIES AND DRAINAGE					
47	Relocate Call Box	$2,051.00	EA		**$0**	
48	Relocate Power Pole	$25,000.00	EA		**$0**	
49	Relocate Catch Basin	$9,760.00	EA		**$0**	
50	Relocate Fire Hydrant	$5,000.00	EA		**$0**	
51	Relocate Utility Boxes	$1,000.00	EA		**$0**	
52	Relocate Main Water Valve	$12,200.00	EA		**$0**	
53	Relocate Utility Vault	$10,000.00	EA		**$0**	
54	Adjust Manhole to Grade	$1,500.00	EA		**$0**	
55	Adjust Water Meter	$1,000.00	EA		**$0**	
56	Adjust Water Valve	$1,000.00	EA		**$0**	
57	Adjust Minor Above Ground Utilities	$1,000.00	EA		**$0**	
58	Construct Striping & Marking	$2.00	LF		**$0**	
59	Construct Storm Drain Main	$122.00	LF		**$0**	
60	Construct RCB	$549.00	CY		**$0**	
61	Construct Channel (Earthen)	$12.20	LF		**$0**	
62	Construct Concrete V-Ditch	$19.00	LF		**$0**	
63	Construct Bridge Widening	$500.00	SF		**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$0**	
	GENERAL					
64	Mobilization	$0	LS	0	**$0**	Included in unit cost
65	Traffic Control	8%	LS	0	**$0**	Included in unit cost
66	Utility Relocations	5%	LS	0	**$0**	None
67	SWPPP Plan and Implementation	6%	LS	0	**$0**	None
	CONSTRUCTION SUBTOTAL				**$350,000**	
	RIGHT-OF-WAY					
68	Right-Of-Way	$70.00	SF		**$0**	
69	Parking Impacts	$20,000.00	EA		**$0**	
70	Temporary Construction Easements	$6.50	SF		**$0**	
71	Right-of-Way Management	10%	LS		**$0**	
	RIGHT-OF-WAY SUBTOTAL				**$0**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$350,000**	
Preliminary Project Development (10% Construction Cost)					**$0**	Not needed for traffic signal
Design Engineering/Administration Cost					**$15,000**	$15k for traffic signal
Construction Engineering Costs/Administration (15% Construction Cost)					**$52,500**	
Contingency (20% Construction Cost)					**$70,000**	
TOTAL PROJECT COSTS					**$487,500**	

City of Santa Ana

City of Santa Ana List of Improvements and Associated Costs

Jurisdiction	Int ID	Intersection / Arterial Location	Improvement Strategy	Cost				Fair Share %	Total Cost to IBC Fee
				Construction Subtotal	ROW Subtotal	Contingency Cost*	Total		
Santa Ana		Alton Overcrossing at SR-55	SR-55/Alton Parkway Overcrossing Project plus the following improvements: • Intersection #44: Red Hill / Alton (Add 1 NBR, convert de facto SBR to 1 SBR, add 2nd EBL, convert 1 WBR to free WBR) • Signalization and widening of Halladay Street / Alton Parkway • Signalization at Daimler Street / Alton Parkway TOTAL	$1,607,512	$493,488	$1,103,756	$55,500,000 $3,204,755 $800,000 $680,000 $60,184,755	50%	$30,092,378
Santa Ana		Dyer Road widening between SR-55 NB on ramp and e/o RR tracks (Phase 2)	Dyer Road widening from SR-55 to Red Hill Avenue (consistent with Barranca-Dyer Project Report)	$6,728,087	$14,246,363	$4,036,852	$25,011,301	90%	$22,510,171
Santa Ana	719	Flower Street and Segerstrom Avenue	Add eastbound de facto lane	$238,813	$53,900	$419,407	$712,124	9.6%	$68,364
								TOTAL	$52,670,912

*Contingency cost includes:

- Preliminary Project Development Cost (10% Construction Cost, minimum $300,000)
- Design Engineering/Administration Cost (15% Construction Cost)
- Construction Engineering Cost/Administration (15% Construction Cost)
- Contingency (20% Construction Cost)

Alton Overcrossing at SR-55

Irvine IBC - Nexus Study

Cost Estimate

Alton Parkway Overcrossing at SR-55 Improvements
Mitigations:
- SR-55/Alton Overcrossing Improvements per KOA Study, 2010 (includes widening of Halladay/Alton intersection of adding 1 EBT and WBT
- Intersection #44: Red Hill Avenue / Alton Parkway (add 1 NBR, 1 SBR, 2nd EBL, and 2nd WBL)
- Signalization at Daimler Street at Alton Parkway, Halladay Street at Alton Parkway

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.29	**$3,585**	
2	Earthwork	$46.00	CY	1333	**$61,333**	
3	Remove Curb & Gutter	$24.00	LF	1150	**$27,600**	
4	Remove Median Curb	$30.00	LF	0	**$0**	
5	Remove PCC Sidewalk	$5.00	SF	8040	**$40,200**	
6	Remove Pavement	$5.00	SF	1150	**$5,750**	
7	Remove Channel	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF	0	**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
10	Remove & Replace Tree	$1,500.00	EA	8	**$12,000**	
11	Modify Driveway	$6,100.00	EA	2	**$12,200**	
12	Construct PCC Pavement	$14.00	SF	700	**$9,800**	Bus turnout
13	Construct AC Pavement	$8.00	SF	11500	**$92,000**	
14	Construct AC Overlay	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	SF	0	**$0**	
16	Construct AC Dike	$15.00	LF	0	**$0**	
17	Construct Curb & Gutter	$30.00	LF	1100	**$33,000**	
18	Construct Concrete Barrier	$80.00	LF	0	**$0**	
19	Construct Median Curb	$31.00	LF	0	**$0**	
20	Construct Median Concrete	$15.00	SF	0	**$0**	
21	Construct Median/Parkway Landscaping	$13.00	SF	3500	**$45,500**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	SF	6500	**$58,825**	
23	Construct Wheelchair Ramp	$6,000.00	EA	4	**$24,000**	
24	Construct Retaining Wall	$75.00	SF	1320	**$99,000**	assume 4'(6'H) x 220 LF wall
25	Remove Retaining Wall	$35.00	SF	0	**$0**	
26	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
27	Sawcut	$4.00	LF	1150	**$4,600**	
	ROADWAY SUBTOTAL				**$529,393**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	4550	**$13,650**	
29	Remove Pavement Markings	$150.00	EA	8	**$1,200**	
30	Relocate Street Light	$6,200.00	EA	2	**$12,400**	
31	Modify Traffic Signal	$325,000.00	EA	0	**$0**	
32	New Traffic Signal	$425,000.00	EA	1	**$425,000**	Replace all new poles and controler
33	Install Striping	$5.00	LF	5750	**$28,750**	
34	Install Pavement Markings	$350.00	EA	22	**$7,700**	
35	Relocate Freeway Sign (2 post)	$700.00	EA	0	**$0**	
36	Loop Detector	$2,000.00	EA	0	**$0**	
37	Remove Roadside Sign	$150.00	EA	0	**$0**	
38	Relocate Sign (1 post)	$220.00	EA	6	**$1,320**	
39	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
40	Relocate Bus Bench	$1,458.00	EA	0	**$0**	
41	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
42	Install Delineator	$36.60	EA	0	**$0**	
43	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$490,020**	
	UTILITIES AND DRAINAGE					
44	Relocate Call Box	$2,051.00	EA	0	**$0**	
45	Relocate Power Pole	$25,000.00	EA	6	**$150,000**	2 complex pole with comm., assume 6 poles
46	Relocate Catch Basin	$9,760.00	EA	2	**$19,520**	
47	Relocate Fire Hydrant	$5,000.00	EA	2	**$10,000**	
48	Relocate Utility Boxes	$1,000.00	EA	21	**$21,000**	
49	Relocate Main Water Valve	$12,200.00	EA	1	**$12,200**	Along Redhill, NW of intersection
50	Relocate Utility Vault	$10,000.00	EA	1	**$10,000**	
51	Adjust Manhole to Grade	$1,500.00	EA	0	**$0**	
52	Adjust Water Meter	$1,000.00	EA	2	**$2,000**	
53	Adjust Water Valve	$1,000.00	EA	2	**$2,000**	
54	Adjust Minor Above Ground Utilities	$1,000.00	EA	0	**$0**	
55	Construct Striping & Marking	$2.00	LF	0	**$0**	
56	Construct Storm Drain Main	$122.00	LF	0	**$0**	
57	Construct RCB	$549.00	CY	0	**$0**	
58	Construct Channel (Earthen)	$12.20	LF	0	**$0**	
59	Construct Concrete V-Ditch	$19.00	LF	0	**$0**	
60	Construct Bridge Widening	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$226,720**	
	GENERAL					
61	Mobilization	$22,672	LS	1	**$124,613**	
62	Traffic Control	8%	LS	1	**$99,691**	
63	Utility Relocation	5%	LS	1	**$62,307**	
64	SWPPP Plan and Implementation	6%	LS	1	**$74,768**	
	CONSTRUCTION SUBTOTAL				**$1,607,512**	
	RIGHT-OF-WAY					
65	Right-Of-Way	$70.00	SF	5875	**$411,250**	
66	Parking Impacts	$20,000.00	EA	0	**$0**	
67	Temporary Construction Easements	$6.50	SF	5750	**$37,375**	
68	Right-of-Way Management	10%	LS	1	**$44,863**	
	RIGHT-OF-WAY SUBTOTAL				**$493,488**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$2,100,999**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$241,127**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$241,127**	
Contingency (20% Construction Cost)					**$321,502**	
TOTAL PROJECT COSTS (Red Hill & Alton)					**$3,204,755**	
Traffic Signal at Alton & Daimler					**$680,000**	Includes all soft costs
Traffic Signal at Alton & Halladay					**$800,000**	Includes all soft costs
Alton/55 Overcrossing Project (cost includes widening of Halladay/Alton intersection; all cost in 2016 $)					**$55,500,000**	
TOTAL ALTON/55 PROJECT COSTS					**$60,184,755**	

HUITT~ZOLLARS

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PS&E COST ESTIMATE - 100% PS&E ROADWAY
ALTON PARKWAY OVERCROSSING
ITEM AND QUANTITY LIST

March 31, 2014
EA 12-005501
Project ID# 12-0000-0003

COMBINED ESTIMATE

Item	Item Code	P/F/S	Item Description	Unit	Actual Quantity	Rounded Quantity	Unit Price	Amount
1	020215		TEMPORARY CRASH CUSHION (TYPE ADIEM)	EA	2.00	2	$30,175	$60,400
2	070012		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1.00	1	$17,000	$17,000
3	070018		TIME-RELATED OVERHEAD	WDAY	325.00	325	$3,400	$1,105,000
4	074016		CONSTRUCTION SITE MANAGEMENT	LS	1.00	1	$81,600	$81,600
5	074019		PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1.00	1	$11,050	$11,100
6	074029		TEMPORARY SILT FENCE	LF	3664.00	3,664	$4	$14,900
7	074033		TEMPORARY CONSTRUCTION ENTRANCE	EA	4.00	4	$5,100	$20,400
8	074038		TEMPORARY DRAINAGE INLET PROTECTION	EA	6.00	6	$357	$2,100
9	074041		STREET SWEEPING	LS	1.00	1	$85,000	$85,000
10	074042		TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	1.00	1	$3,400	$3,400
11	074056		RAIN EVENT ACTION PLAN	EA	35.30	36	$850	$30,600
12	074057		STORM WATER ANNUAL REPORT	EA	1.00	1	$3,400	$3,400
13	074058		STORM WATER SAMPLING AND ANALYSIS DAY	DAY	15.50	16	$1,950	$31,200
14	120090	S	CONSTRUCTION AREA SIGNS	LS	1.00	1	$42,500	$42,500
15	120100	S	TRAFFIC CONTROL SYSTEM	LS	1.00	1	$221,000	$221,000
16	128650	S	PORTABLE CHANGEABLE MESSAGE SIGN	LS	1.00	1	$127,500	$127,500
17	120149		TEMPORARY PAVEMENT MARKING (PAINT)	SF	66.00	66	$4	$300
18	120159		TEMPORARY TRAFFIC STRIPE (PAINT)	LF	30326.26	30,327	$1	$25,800
19	120300		TEMPORARY PAVEMENT MARKER	EA	3634.57	3,635	$9	$32,400
20	129000		TEMPORARY RAILING (TYPE K)	LF	3940.00	3,940	$26	$100,500
21	129100		TEMPORARY CRASH CUSHION MODULE	EA	56.00	56	$595	$33,300
22	129150		TEMPORARY TRAFFIC SCREEN	LF	3940.00	3,940	$7	$28,500
23	141101		REMOVE YELLOW PAINTED TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	32244.10	32,245	$1	$46,600
24	141103		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	1917.85	1,918	$3	$5,200
25	150608		REMOVE CHAIN LINK FENCE	LF	180.00	180	$10	$1,800
26	150662		REMOVE METAL BEAM GUARD RAILING	LF	1287.50	1,288	$14	$18,000
27	150717		REMOVE TRAFFIC STRIPE AND PAVEMENT MARKING	SQFT	99.00	99	$3	$300
28	150722		REMOVE PAVEMENT MARKER	EA	5552.40	5,553	$2	$12,300
29	150771		REMOVE ASPHALT CONCRETE DIKE	LF	559.65	560	$4	$2,500
30	150860		REMOVE BASE AND SURFACING	CY	2522.30	2,523	$34	$85,800
31	152387		RELOCATE ROADSIDE SIGN-TWO POST	EA	2.00	2	$1,615	$3,200
32	153221		REMOVE CONCRETE BARRIER	LF	176.07	177	$36	$6,300
33	160101	P	CLEARING AND GRUBBING	LS	1.00	1	$102,000	$102,000
34	170101	P	DEVELOP WATER SUPPLY	LS	1.00	1	$170,000	$170,000
35	190101		ROADWAY EXCAVATION	CY	1532.01	1,533	$43	$65,200
36	190107		ROADWAY EXCAVATION (TYPE Y-1) (AERIALLY DEPOSITED LEAD)	CY	1532.01	1,533	$31	$46,900
37	190110		LEAD COMPLIANCE PLAN	LS	1.00	1	$8,500	$8,500

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PS&E COST ESTIMATE - 100% PS&E ROADWAY
ALTON PARKWAY OVERCROSSING
ITEM AND QUANTITY LIST

March 31, 2014
EA 12-005501
Project ID# 12-0000-0003

COMBINED ESTIMATE

Item	Item Code	P/F/S	Item Description	Unit	Actual Quantity	Rounded Quantity	Unit Price	Amount
38	192003	F	STRUCTURE EXCAVATION (BRIDGE)	CY	478.00	478	$179	$85,300
39	192020		STRUCTURE EXCAVATION (TYPE D)	CY	382.00	382	$187	$71,400
40	193003	F	STRUCTURE BACKFILL (BRIDGE)	CY	1053.00	1,053	$128	$134,300
41	203031		EROSION CONTROL (HYDROSEED)	SF	65694.00	65,694	$1	$55,800
42	204099	S	PLANT ESTABLISHMENT WORK	LS	1.00	1	$17,000	$17,000
43	250201		CLASS 2 AGGREGATE SUBBASE	CY	1364.95	1,365	$44	$60,300
44	390132		HOT MIX ASPHALT (TYPE A)	TON	2860.82	2,861	$213	$608,000
45	390137		RUBBERIZED ASPHALT CONCRETE (TYPE G)	TON	133.36	134	$272	$36,400
46	394046		PLACE ASPHALT CONCRETE DIKE (TYPE D)	LF	559.65	560	$83	$46,600
47	490780		FURNISH PILING (CLASS 200)	LF	7594.00	7,594	$39	$296,900
48	490781		DRIVE PILE (CLASS 200)	EA	138.00	138	$3,400	$469,200
49	500001		PRESTRESSING STEEL	LS	1.00	1	$425,000	$425,000
50	510051	F	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	374.00	374	$782	$292,500
51	510053	F	STRUCTURAL CONCRETE, BRIDGE	CY	2892.00	2,892	$1,258	$3,638,100
52	510086		STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	CY	200.00	200	$952	$190,400
53	519100		JOINT SEAL (MR = 2")	LF	180.00	180	$145	$26,000
54	520102	F/S	BAR REINFORCING STEEL (BRIDGE)	LB	703608.00	703,608	$2	$1,196,100
55	560203		FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	3735.00	3,735	$12	$44,400
56	560204		INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	3735.00	3,735	$9	$31,700
57	566011		ROADSIDE SIGN - ONE POST	EA	31.00	31	$553	$17,100
58	800360		CHAIN LINK FENCE (TYPE CL-6)	LF	81.98	82	$37	$3,100
59	802501		4' CHAIN LINK GATE (TYPE CL-6)	EA	1.00	1	$1,870	$1,900
60	820134		OBJECT MARKER (TYPE P)	EA	12.00	12	$136	$1,600
61	832003		METAL BEAM GUARD RAILING (WOOD POST)	LF	1422.29	1,423	$85	$121,000
62	833032	F/S	CHAIN LINK RAILING (TYPE 7)	LF	663.00	663	$105	$69,900
63	833088		TUBULAR HANDRAILING	LF	120.00	120	$122	$14,700
64	833142	F	CONCRETE BARRIER (TYPE 26 MOD)	LF	783.00	783	$221	$173,000
65	839585		ALTERNATIVE FLARED TERMINAL SYSTEM	EA	1.00	1	$4,420	$4,400
66	839705		CONCRETE BARRIER (TYPE 60E)	LF	315.76	316	$306	$96,700
67	840501	S	THERMOPLASTIC TRAFFIC STRIPE	LF	5112.23	5,113	$1	$6,100
68	840515	S	THERMOPLASTIC PAVEMENT MARKING	SF	132.00	132	$6	$800
69	840656	S	PAINT TRAFFIC STRIPE (2-COAT)	LF	40286.47	40,287	$0	$9,600
70	850101	S	PAVEMENT MARKER (NON-REFLECTIVE)	EA	3882.24	3,883	$3	$13,200
71	850111	S	PAVEMENT MARKER (RETROREFLECTIVE)	EA	2090.55	2,091	$7	$14,200
72	860090		MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	1.00	1	$34,000	$34,000
73	860460		LIGHTING AND SIGN ILLUMIATION	LS	1.00	1	$64,600	$64,600

HUITT~ZOLLARS

HUITT-ZOLLARS
PS&E COST ESTIMATE - 100% PS&E ROADWAY
ALTON PARKWAY OVERCROSSING
ITEM AND QUANTITY LIST

March 31, 2014
EA 12-005501
Project ID# 12-0000-0003

COMBINED ESTIMATE

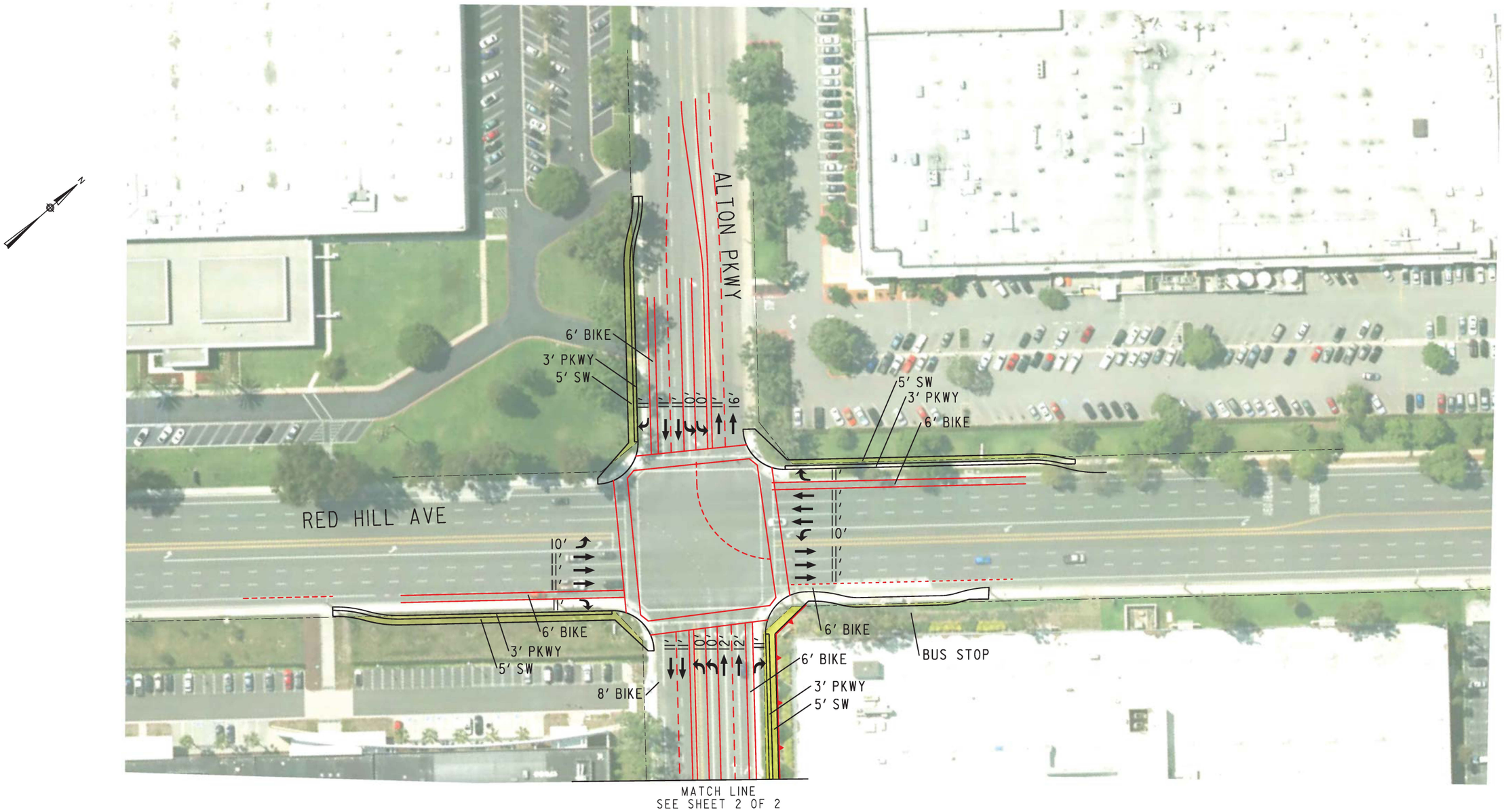
Item	Item Code	P/F/S	Item Description	Unit	Actual Quantity	Rounded Quantity	Unit Price	Amount
74	860930		TRAFFIC MONITORING STATION	LS	1.00	1	$56,100	$56,100
75	861100		RAMP METER SYSTEM	LS	1.00	1	$15,300	$15,300
76	999990		MOBILIZATION	LS	1.00	1	10%	$1,226,000
			SUBTOTAL					**$12,321,200**

SUPPLEMENTAL WORK AND CITY FURNISHED MATERIAL

Item	Item Code	P/F/S	Item Description	Unit	Actual Quantity	Rounded Quantity	Unit Price	Amount
77	066062		COZEEP CONTRACT	LS	1	1	$102,000.00	$102,000
78	066063		TRAFFIC MANAGEMENT PLAN & PUBLIC INFORMATION	LS	1	1	$51,000.00	$51,000
79	066070		MAINTAINING TRAFFIC	LS	1	1	$59,500.00	$59,500
80	066595		WATER POLLUTION CONTROL MAINTENANCE SHARING	LS	1	1	$17,000.00	$17,000
81	066596		ADDITIONAL WATER POLLUTION CONTROL	LS	1	1	$13,600.00	$13,600
82	066597		STORM WATER SAMPLING AND ANALYSIS	LS	1	1	$8,500.00	$8,500
83	066600		DISPOSAL OF YELLOW PAINTED TRAFFIC STRIPE	LS	1	1	$17,000.00	$17,000
84	066610		PARTNERING	LS	1	1	$34,000.00	$34,000
85	066666		COMPENSATION ADJUSTMENT FOR PRICE INDEX FLUCTUATIONS OF PAVING ASPHALT	LS	1	1	$51,000.00	$51,000
86			LOCAL ASSISTANCE (CITIES)	LS	1	1	$34,000.00	$34,000
			SUBTOTAL					**$387,600**

NET SUBTOTAL	$12,700,000
CONTINGENCIES (10%)	$1,300,000
TOTAL (Caltrans)	**$14,000,000**
Total (Street from separate file)	**$10,400,000**
Hazardous Material Removal	**$8,000,000**
Right of Way	**$22,500,000**
Design Cost (Update PS&E and Revalidation)	**$600,000**
GRAND TOTAL	**$55,500,000**

Concept plans for Alton Overcrossing at SR-55 was not developed as part of the IBC Fee Study. The concept remains the same as was developed as part of "Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening in the Cities of Santa Ana and Irvine, May 2010"



LEGEND

- (S) SIGNALIZED INTERSECTION
- DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH
- PROPOSED RETAINING WALL

MITIGATIONS - IRVINE INTERSECTION 44

1. ADD 1 NBR
2. ADD 1 SBR
3. ADD 2ND EBL
4. ADD 2ND WBT

IRVINE INTERSECTION 44
RED HILL AVE & ALTON PKWY
SHEET 1 OF 2

DECEMBER, 2016

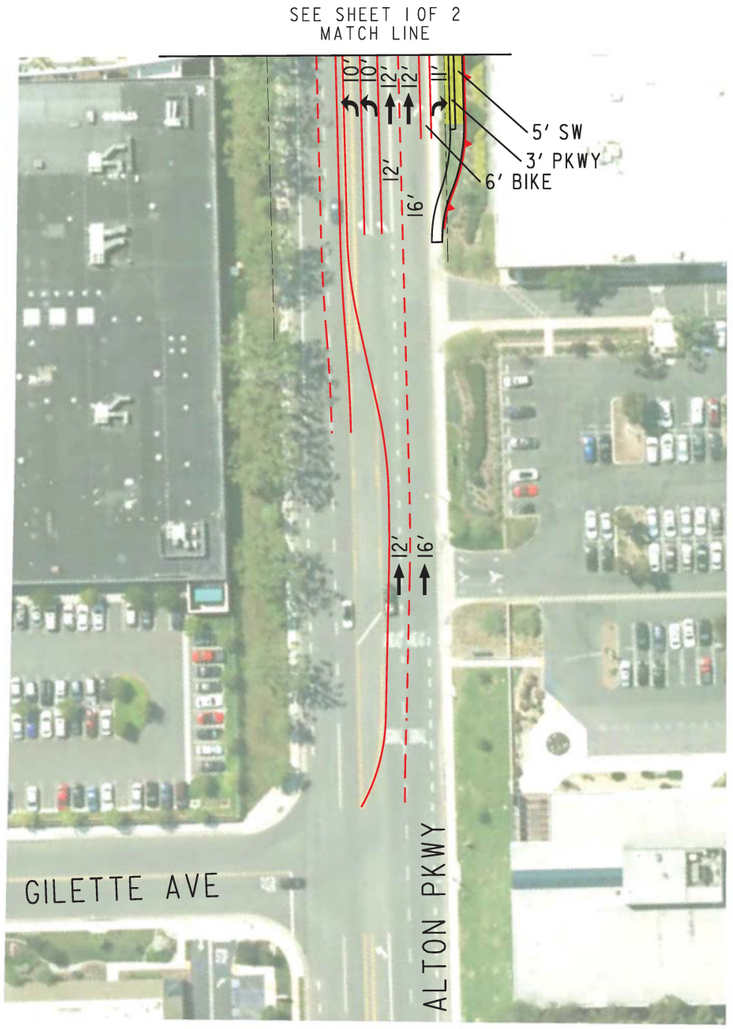
PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - IRVINE INTERSECTION 44

1. ADD 1 NBR
2. ADD 1 SBR
3. ADD 2ND EBL
4. ADD 2ND WBT

IRVINE INTERSECTION 44
RED HILL AVE & ALTON PKWY
SHEET 2 OF 2

SEPTEMBER 14, 2016

PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

Dyer Road widening between SR-55 NB on-ramp and Red Hill Avenue (Phase 2)

Irvine IBC - Nexus Study

Cost Estimate

Intersection
Dyer Rd & SR-55
Mitigations: Dyer Rd widening from SR-55 to Red Hill

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	3.52	**$42,940**	Original area + 2-6' bike lanes
2	Earthwork	$46.00	CY	6500	**$299,000**	116,500 sf x 1.5' deep/27 = 6,500 CY
3	Remove Curb & Gutter	$24.00	LF	4830	**$115,920**	
4	Remove Median Curb	$30.00	LF	0	**$0**	
5	Remove PCC Sidewalk	$5.00	SF	36975	**$184,875**	
6	Remove Pavement	$5.00	SF	5750	**$28,750**	1' sawcut (AC) and 750 SF (PCC)
7	Remove Channel	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF	0	**$0**	
9	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
10	Remove & Replace Tree	$1,500.00	EA	64	**$96,000**	
11	Modify Driveway	$6,100.00	EA	15	**$91,500**	
12	Construct PCC Pavement	$14.00	SF	750	**$10,500**	Bus Stop Pad
13	Construct AC Pavement	$8.00	SF	70000	**$560,000**	
14	Construct AC Overlay	$3.60	SF	0	**$0**	
15	Construct Slurry Seal	$0.40	SF	0	**$0**	
16	Construct AC Dike	$15.00	LF	270	**$4,050**	
17	Construct Curb & Gutter	$30.00	LF	4815	**$144,450**	
18	Construct Concrete Barrier	$80.00	LF	0	**$0**	
19	Construct Median Curb	$31.00	LF	0	**$0**	
20	Construct Median Concrete	$15.00	SF	0	**$0**	
21	Construct Median/Parkway Landscaping	$13.00	SF	22500	**$292,500**	Includes new irrigation, Excludes Ex irrigation util box relocation
22	Construct PCC Sidewalk	$9.05	SF	46400	**$419,920**	
23	Construct Wheelchair Ramp	$6,000.00	EA	9	**$54,000**	
24	Construct Retaining Wall	$75.00	SF	1200	**$90,000**	assume 3'(4'H) x 300 LF wall at toe.
25	Remove Retaining Wall	$35.00	SF	0	**$0**	
26	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
27	Sawcut	$4.00	LF	5000	**$20,000**	
	ROADWAY SUBTOTAL				**$2,454,405**	
	TRAFFIC					
28	Remove Striping	$3.00	LF	844	**$2,532**	
29	Remove Pavement Markings	$150.00	EA	12	**$1,800**	
30	Relocate Street Light	$6,200.00	EA	19	**$117,800**	includes 5 new on so side east of tracks
31	Modify Traffic Signal	$325,000.00	EA	2	**$650,000**	1 full and 2 partials
32	New Traffic Signal	$425,000.00	EA	0	**$0**	
33	Install Striping	$5.00	LF	9200	**$46,000**	
34	Install Pavement Markings	$350.00	EA	25	**$8,750**	
35	Relocate Freeway Sign (2 post)	$700.00	EA	0	**$0**	
36	Loop Detector	$2,000.00	EA	21	**$42,000**	video detection at Barranca/Redhill
37	Remove Roadside Sign	$150.00	EA	1	**$150**	
38	Relocate Sign (1 post)	$220.00	EA	58	**$12,760**	
39	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
40	Relocate Commercial Sign	$3,000.00	EA	4	**$12,000**	
41	Relocate Bus Bench	$1,458.00	EA	3	**$4,374**	1 stop counted as 2 because of canopy
42	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
43	Install Delineator	$36.60	EA	0	**$0**	
44	Apply ATMS	$113,165.00	LS	0	**$0**	
45	Railroad Signal, panels and coordination		LS	1	**$1,500,000**	
	TRAFFIC SUBTOTAL				**$2,398,166**	
	UTILITIES AND DRAINAGE					
46	Relocate Call Box	$2,051.00	EA	0	**$0**	
47	Relocate Power Pole	$25,000.00	EA	2	**$50,000**	
48	Relocate Catch Basin	$9,760.00	EA	5	**$48,800**	1 large CB counted as 2
49	Relocate Fire Hydrant	$5,000.00	EA	8	**$40,000**	
50	Relocate Utility Boxes	$1,000.00	EA	64	**$64,000**	
51	Relocate Main Water Valve	$12,200.00	EA	6	**$73,200**	
52	Relocate Utility Vault	$10,000.00	EA	4	**$40,000**	
53	Adjust Manhole to Grade	$1,500.00	EA	8	**$12,000**	
54	Adjust Water Meter	$1,000.00	EA	10	**$10,000**	
55	Adjust Water Valve	$1,000.00	EA	9	**$9,000**	
56	Adjust Minor Above Ground Utilities	$1,000.00	EA	15	**$15,000**	
57	Construct Striping & Marking	$2.00	LF	0	**$0**	
58	Construct Storm Drain Main	$122.00	LF	0	**$0**	
59	Parkway Drain	$1,000.00	$EA	1	**$1,000**	
60	Construct RCB	$549.00	CY	0	**$0**	
61	Construct Channel (Earthen)	$12.20	LF	0	**$0**	
62	Construct Concrete V-Ditch	$19.00	LF	0	**$0**	
63	Construct Bridge Widening	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$363,000**	
	GENERAL					
63	Mobilization	$36,300	LS	1	**$521,557**	
64	Utility Relocation	5%	LS	1	**$260,779**	
65	Traffic Control	8%	LS	1	**$417,246**	
66	SWPPP Plan and Implementation	6%	LS	1	**$312,934**	
	CONSTRUCTION SUBTOTAL				**$6,728,087**	
	RIGHT-OF-WAY					
67	Right-Of-Way	$70.00	SF	135112	**$9,457,859**	
68	Building Demolition	$1,000,000.00	EA	3	**$3,000,000**	1 per full take
69	Parking Impacts	$20,000.00	EA	18	**$360,000**	
70	Temporary Construction Easements	$6.50	SF	20520	**$133,380**	
71	Right-of-Way Management	10%	LS	1	**$1,295,124**	
	RIGHT-OF-WAY SUBTOTAL				**$14,246,363**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$20,974,449**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$672,809**	
Design Engineering/Administration Cost (15% Construction Cost)					**$1,009,213**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$1,009,213**	
Contingency (20% Construction Cost)					**$1,345,617**	
TOTAL PROJECT COSTS					**$25,011,301**	



LEGEND

- (S) SIGNALIZED INTERSECTION
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MITIGATIONS - SANTA ANA INTERSECTION

(1) DYER RD WIDENING - RED HILL TO SR-55

(CONSISTENT WITH PROJECT REPORT DATED MAY 2004)

SANTA ANA INTERSECTION
SR-55 & DYER RD
SHEET 1 OF 3

DECEMBER, 2016

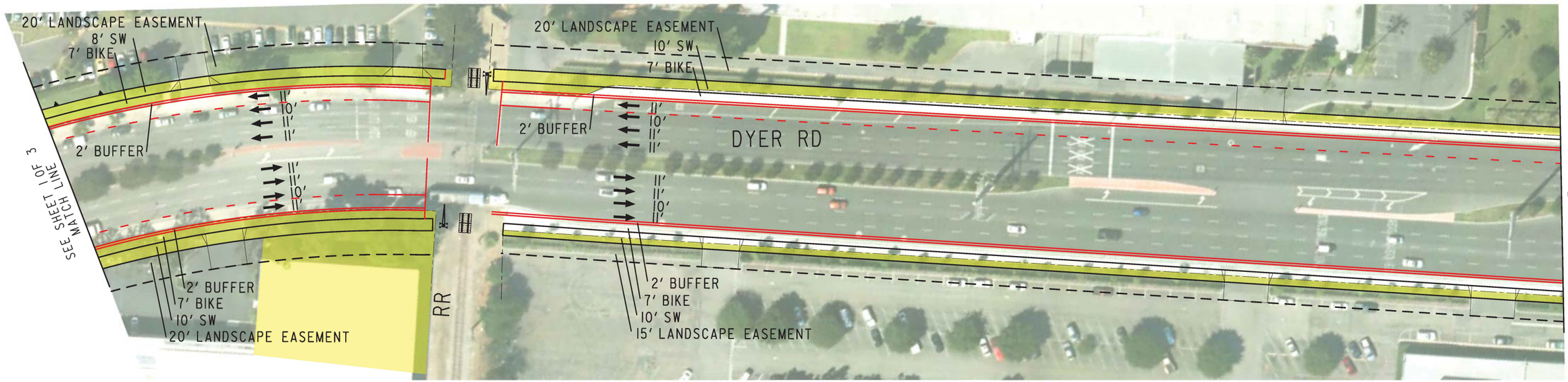
PLAN PREPARED BY: HDR

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



SANTA ANA INTERSECTION
SR-55 & DYER RD
SHEET 2 OF 3

LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
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MITIGATIONS - SANTA ANA INTERSECTION

(1) DYER RD WIDENING - RED HILL TO SR-55
(CONSISTENT WITH PROJECT REPORT DATED MAY 2004)

DECEMBER, 2016

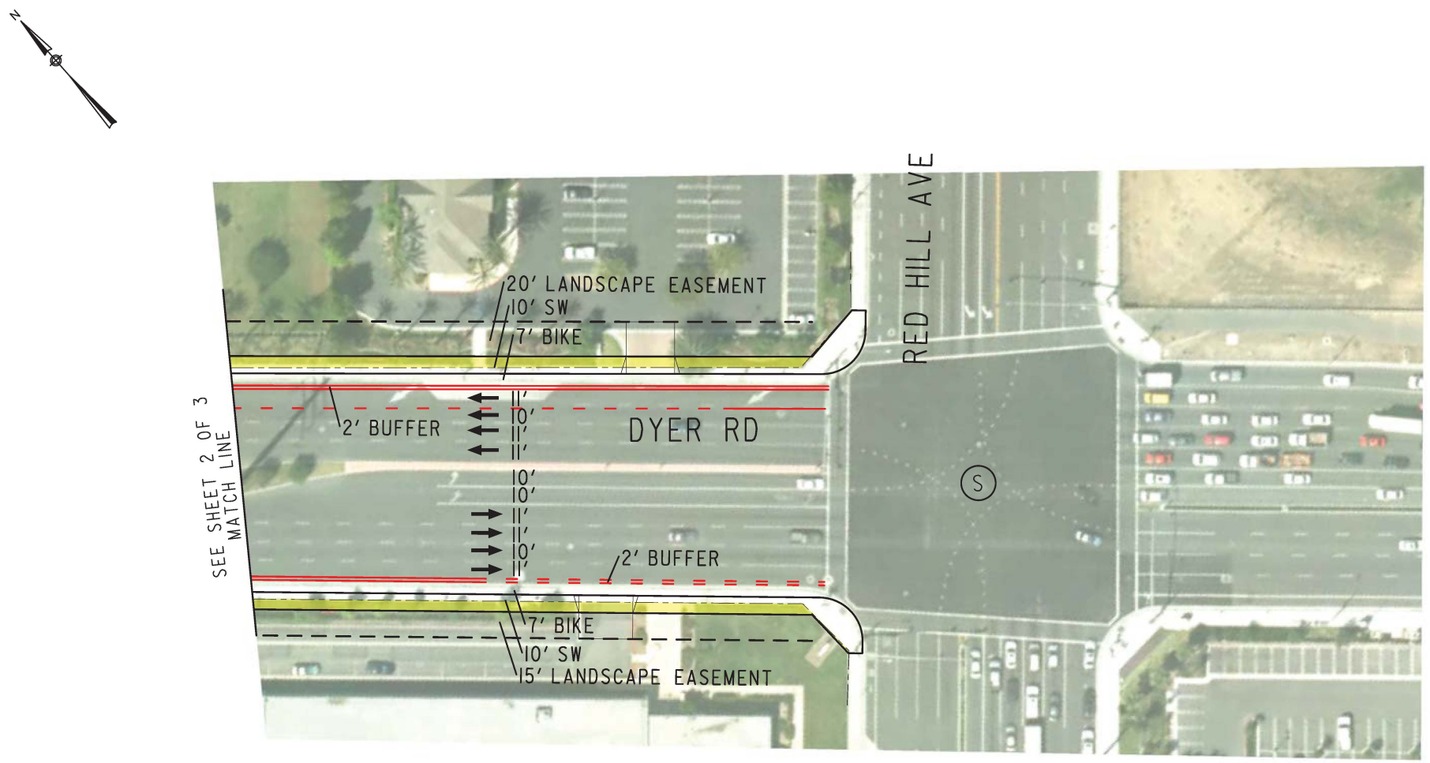
PLAN PREPARED BY:

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07



SANTA ANA INTERSECTION
SR-55 & DYER RD
SHEET 3 OF 3

LEGEND

- (S) SIGNALIZED INTERSECTION
- → DIRECTION OF TRAVEL
- PROPOSED ROW
- XX' PROPOSED LANE WIDTH

MITIGATIONS - SANTA ANA INTERSECTION

(I) DYER RD WIDENING - RED HILL TO SR-55
(CONSISTENT WITH PROJECT REPORT DATED MAY 2004)

DECEMBER, 2016

PLAN PREPARED BY:

2015 IBC NEXUS STUDY
ROADWAY IMPROVEMENTS

CITY OF IRVINE
COMMUNITY DEVELOPMENT

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

Flower Street and Segerstrom Avenue

Note: Concepts were not developed for the 2015 IBC Fee Update at this location since it is consistent with 2010 IBC Fee Study

Irvine IBC - Nexus Study

Cost Estimate

Intersection 719
Flower St & Segerstrom Ave
Mitigations: Add EB Defacto Lane

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.10	**$1,220**	
2	Earthwork	$46.00	CY	66	**$3,036**	
3	Remove Curb & Gutter	$24.00	LF	0	**$0**	
4	Remove Median Curb	$30.00	LF	280	**$8,400**	
5	Remove PCC Sidewalk	$5.00	SF	1890	**$9,450**	
6	Remove Pavement	$5.00	SF	560	**$2,800**	
7	Remove Channel	$40.00	LF	0	**$0**	
8	Remove/Replace Chain Link Fence	$35.00	LF	0	**$0**	
9	Remove and Replace Pedestal and Wrought Iron Fence	$75.00	LF	0	**$0**	
10	Remove and Replace Vinyl Fence	$40.00	LF	0	**$0**	
11	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
12	Remove & Replace Tree	$1,500.00	EA	4	**$6,000**	
13	Modify Driveway	$6,100.00	EA	0	**$0**	
14	Construct PCC Pavement	$14.00	SF	1120	**$15,680**	
15	Construct AC Pavement	$8.00	SF	1780	**$14,240**	
16	Construct AC Overlay	$3.60	SF	0	**$0**	
17	Construct Slurry Seal	$0.40	SF	0	**$0**	
18	Construct AC Dike	$15.00	LF	0	**$0**	
19	Construct Curb & Gutter	$30.00	LF	270	**$8,100**	
20	Construct Concrete Barrier	$80.00	LF	0	**$0**	
21	Construct Median Curb	$31.00	LF	0	**$0**	
22	Construct Median Concrete	$15.00	SF	0	**$0**	
23	Construct Median/Parkway Landscaping	$13.00	SF	0	**$0**	
24	Construct PCC Sidewalk	$9.05	SF	2090	**$18,915**	
25	Construct Wheelchair Ramp	$6,000.00	EA	1	**$6,000**	
26	Construct Retaining Wall	$75.00	SF	0	**$0**	
27	Remove Retaining Wall	$35.00	SF	0	**$0**	
28	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
29	Sawcut	$4.00	LF	290	**$1,160**	
	ROADWAY SUBTOTAL				**$95,001**	
	TRAFFIC					
30	Remove Striping	$3.00	LF	0	**$0**	
31	Remove Pavement Markings	$150.00	EA	0	**$0**	
32	Relocate Street Light	$6,200.00	EA	1	**$6,200**	
33	Modify Traffic Signal	$325,000.00	EA	0.25	**$81,250**	
34	New Traffic Signal	$425,000.00	EA	0	**$0**	
35	Install Striping	$5.00	LF	0	**$0**	
36	Install Pavement Markings	$350.00	EA	0	**$0**	
37	Relocate Freeway Sign (2 post)	$700.00	EA	0	**$0**	
38	Loop Detector	$2,000.00	EA	0	**$0**	
39	Remove Roadside Sign	$150.00	EA	0	**$0**	
40	Relocate Sign (1 post)	$220.00	EA	1	**$220**	
41	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
42	Relocate Bus Bench	$1,458.00	EA	1	**$1,458**	
43	Relocate Automatic Gate	$10,000.00	EA	0	**$0**	
44	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
45	Install Delineator	$36.60	EA	0	**$0**	
46	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$89,128**	
	UTILITIES AND DRAINAGE					
47	Relocate Call Box	$2,051.00	EA	0	**$0**	
48	Relocate Power Pole	$25,000.00	EA	0	**$0**	
49	Relocate Catch Basin	$9,760.00	EA	0	**$0**	
50	Relocate Fire Hydrant	$5,000.00	EA	0	**$0**	
51	Relocate Utility Boxes	$1,000.00	EA	1	**$1,000**	
52	Relocate Main Water Valve	$12,200.00	EA	0	**$0**	
53	Relocate Utility Vault	$10,000.00	EA	0	**$0**	
54	Adjust Manhole to Grade	$1,500.00	EA	0	**$0**	
55	Adjust Water Meter	$1,000.00	EA	0	**$0**	
56	Adjust Water Valve	$1,000.00	EA	0	**$0**	
57	Adjust Minor Above Ground Utilities	$1,000.00	EA	0	**$0**	
58	Construct Striping & Marking	$2.00	LF	0	**$0**	
59	Construct Storm Drain Main	$122.00	LF	0	**$0**	
60	Construct RCB	$549.00	CY	0	**$0**	
61	Construct Channel (Earthen)	$12.20	LF	0	**$0**	
62	Construct Concrete V-Ditch	$19.00	LF	0	**$0**	
63	Construct Bridge Widening	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$1,000**	
	GENERAL					
64	Mobilization	10%	LS	1	**$18,513**	
65	Traffic Control	8%	LS	1	**$14,810**	
66	Utility Relocations	5%	LS	1	**$9,256**	
67	SWPPP Plan and Implementation	6%	LS	1	**$11,108**	
	CONSTRUCTION SUBTOTAL				**$238,816**	
	RIGHT-OF-WAY					
68	Right-Of-Way	$70.00	SF	700	**$49,000**	
69	Parking Impacts	$20,000.00	EA	0	**$0**	
70	Temporary Construction Easements	$6.50	SF	0	**$0**	
71	Right-of-Way Management	10%	LS	0	**$4,900**	
	RIGHT-OF-WAY SUBTOTAL				**$53,900**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$292,716**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$35,822**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$35,822**	
Contingency (20% Construction Cost)					**$47,763**	
TOTAL PROJECT COSTS					**$712,124**	

LEGEND

- CENTERLINE
- RIGHT OF WAY TAKE
- RIGHT OF WAY
- RETAINING WALL



MITIGATION:
+ ADD EB DE FACTO RIGHT TURN LANE

SANTA ANA - INTERSECTION 719
FLOWER STREET AND SEGERSTROM AVENUE

Source: Irvine Business Complex, Vision Plan Traffic Fee Nexus Study, 2010

$$$$$$$SYTIME$$$$$
DGN#SPEC#################
curdojai

City of Costa Mesa

City of Costa Mesa List of Improvements and Associated Costs

Jurisdiction	Int ID	Intersection / Arterial Location	Improvement Strategy	Construction Subtotal	ROW Subtotal	Contingency Cost*	Total	Fair Share %	Total Cost to IBC Fee
Costa Mesa	10	SR-55 Frontage Road SB Ramps at Paularino	Improve Southbound to 1.5 Left, 1.5 Through, 1 Right.	$585,227	$29,260	$592,613	$1,207,101	2.4%	$28,970
								TOTAL	$28,970

*Contingency cost includes:

- Preliminary Project Development Cost (10% Construction Cost, minimum $300,000)
- Design Engineering/Administration Cost (15% Construction Cost)
- Construction Engineering Cost/Administration (15% Construction Cost)
- Contingency (20% Construction Cost)

10 - SR-55 Frontage Road SB Ramps at Paularino

Note: Concepts were not developed for the 2015 IBC Fee Update at this location since it is consistent with 2010 IBC Fee Study

Irvine IBC - Nexus Study

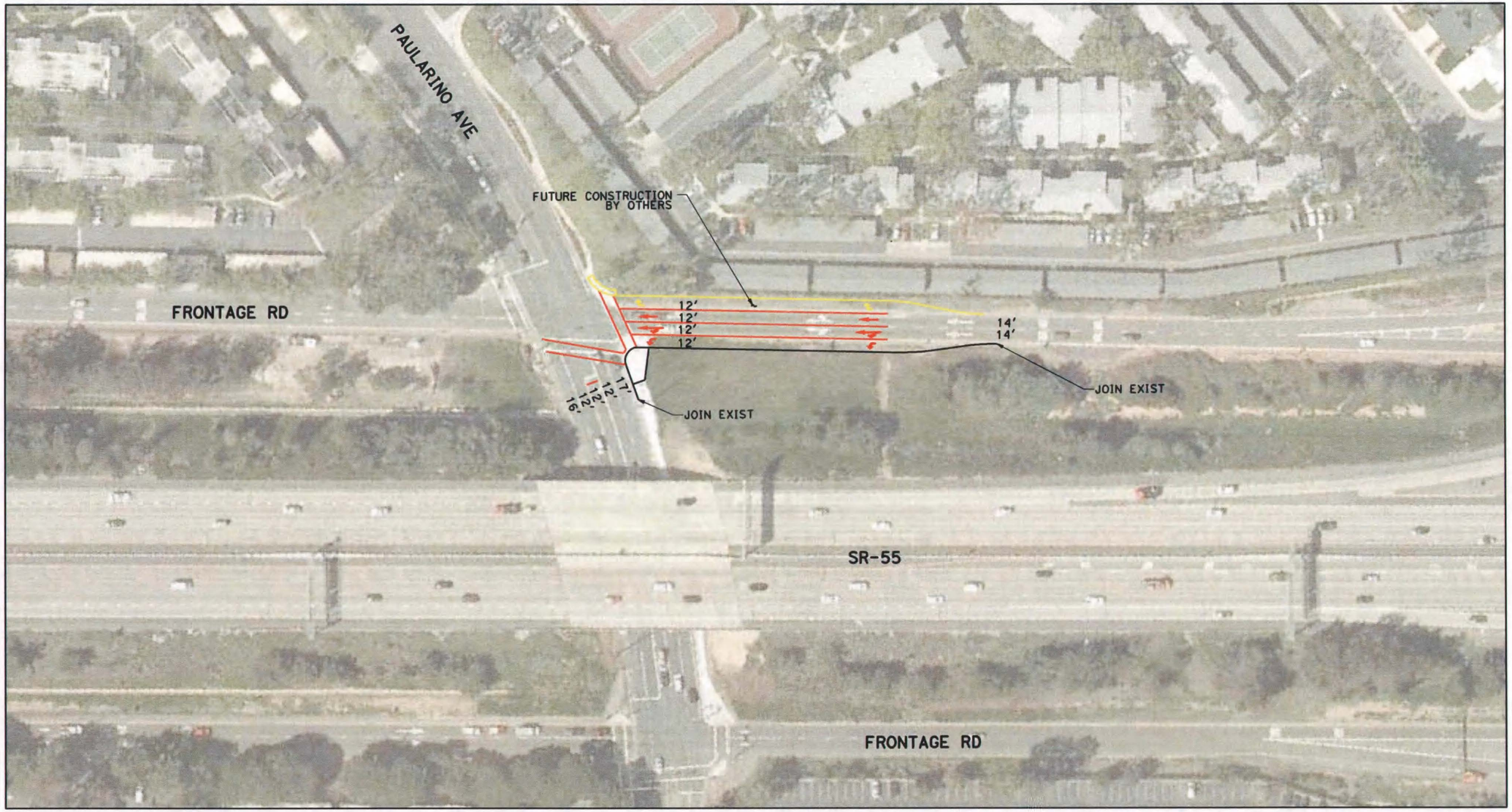
Cost Estimate

Intersection 10
SR-55 Frontage Roads & Palarino
Mitigations: Improve SB to 1.5L, 1.5T, 1R

ITEM #	DESCRIPTION OF WORK	UNIT PRICE	UNIT	QUANTITY	COST	NOTES
	ROADWAY					
1	Clear & Grub	$12,200.00	AC	0.10	**$1,220**	
2	Earthwork	$46.00	CY	620	**$28,520**	
3	Remove Curb & Gutter	$24.00	LF	730	**$17,520**	
4	Remove Median Curb	$30.00	LF	0	**$0**	
5	Remove PCC Sidewalk	$5.00	SF	330	**$1,650**	
6	Remove Pavement	$5.00	SF	1370	**$6,850**	
7	Remove Channel	$40.00	LF	6	**$240**	
8	Remove/Replace Chain Link Fence	$35.00	LF	160	**$5,600**	
9	Remove and Replace Pedestal and Wrought Iron Fence	$75.00	LF	0	**$0**	
10	Remove and Replace Vinyl Fence	$40.00	LF	0	**$0**	
11	Reconstruct Metal Beam Guard Rail	$40.00	LF	0	**$0**	
12	Remove & Replace Tree	$1,500.00	EA	0	**$0**	
13	Modify Driveway	$6,100.00	EA	0	**$0**	
14	Construct PCC Pavement	$14.00	SF	0	**$0**	
15	Construct AC Pavement	$8.00	SF	5580	**$44,640**	
16	Construct AC Overlay	$3.60	SF	0	**$0**	
17	Construct Slurry Seal	$0.40	SF	0	**$0**	
18	Construct AC Dike	$15.00	LF	0	**$0**	
19	Construct Curb & Gutter	$30.00	LF	690	**$20,700**	
20	Construct Concrete Barrier	$80.00	LF	0	**$0**	
21	Construct Median Curb	$31.00	LF	0	**$0**	
22	Construct Median Concrete	$15.00	SF	0	**$0**	
23	Construct Median/Parkway Landscaping	$13.00	SF	0	**$0**	
24	Construct PCC Sidewalk	$9.05	SF	630	**$5,702**	
25	Construct Wheelchair Ramp	$6,000.00	EA	2	**$12,000**	
26	Construct Retaining Wall	$75.00	SF	0	**$0**	
27	Remove Retaining Wall	$35.00	SF	0	**$0**	
28	Relocate Monument Wall	$20,000.00	EA	0	**$0**	
29	Sawcut	$4.00	LF	710	**$2,840**	
	ROADWAY SUBTOTAL				**$147,482**	
	TRAFFIC					
30	Remove Striping	$3.00	LF	0	**$0**	
31	Remove Pavement Markings	$150.00	EA	0	**$0**	
32	Relocate Street Light	$6,200.00	EA	0	**$0**	
33	Modify Traffic Signal	$325,000.00	EA	0.75	**$243,750**	
34	New Traffic Signal	$425,000.00	EA	0	**$0**	
35	Install Striping	$5.00	LF	3080	**$15,400**	
36	Install Pavement Markings	$350.00	EA	0	**$0**	
37	Relocate Freeway Sign (2 post)	$700.00	EA	1	**$700**	
38	Loop Detector	$2,000.00	EA	0	**$0**	
39	Remove Roadside Sign	$150.00	EA	0	**$0**	
40	Relocate Sign (1 post)	$220.00	EA	2	**$440**	
41	Overhead Sign (2 posts)	$240,000.00	EA	0	**$0**	
42	Relocate Bus Bench	$1,458.00	EA	0	**$0**	
43	Relocate Automatic Gate	$10,000.00	EA	0	**$0**	
44	Install Ramp Metering System	$80,000.00	EA	0	**$0**	
45	Install Delineator	$36.60	EA	0	**$0**	
46	Apply ATMS	$113,165.00	LS	0	**$0**	
	TRAFFIC SUBTOTAL				**$260,290**	
	UTILITIES AND DRAINAGE					
47	Relocate Call Box	$2,051.00	EA	0	**$0**	
48	Relocate Power Pole	$25,000.00	EA	1	**$25,000**	
49	Relocate Catch Basin	$9,760.00	EA	1	**$9,760**	
50	Relocate Fire Hydrant	$5,000.00	EA	0	**$0**	
51	Relocate Utility Boxes	$1,000.00	EA	1	**$1,000**	
52	Relocate Main Water Valve	$12,200.00	EA	0	**$0**	
53	Relocate Utility Vault	$10,000.00	EA	1	**$10,000**	
54	Adjust Manhole to Grade	$1,500.00	EA	0	**$0**	
55	Adjust Water Meter	$1,000.00	EA	0	**$0**	
56	Adjust Water Valve	$1,000.00	EA	0	**$0**	
57	Adjust Minor Above Ground Utilities	$1,000.00	EA	0	**$0**	
58	Construct Striping & Marking	$2.00	LF	0	**$0**	
59	Construct Storm Drain Main	$122.00	LF	0	**$0**	
60	Construct RCB	$549.00	CY	0	**$0**	
61	Construct Channel (Earthen)	$12.20	LF	0	**$0**	
62	Construct Concrete V-Ditch	$19.00	LF	7	**$133**	
63	Construct Bridge Widening	$500.00	SF	0	**$0**	
	UTILITIES AND DRAINAGE SUBTOTAL				**$45,893**	
	GENERAL					
64	Mobilization	10%	LS	1	**$45,366**	
65	Traffic Control	8%	LS	1	**$36,293**	
66	Utility Relocations	5%	LS	1	**$22,683**	
67	SWPPP Plan and Implementation	6%	LS	1	**$27,220**	
	CONSTRUCTION SUBTOTAL				**$585,227**	
	RIGHT-OF-WAY					
68	Right-Of-Way	$70.00	SF	380	**$26,600**	
69	Parking Impacts	$20,000.00	EA	0	**$0**	
70	Temporary Construction Easements	$6.50	SF	0	**$0**	
71	Right-of-Way Management	10%	LS	1	**$2,660**	
	RIGHT-OF-WAY SUBTOTAL				**$29,260**	
TOTAL CONSTRUCTION & RIGHT-OF-WAY COST:					**$614,487**	
Preliminary Project Development (10% Construction Cost, min $300,000)					**$300,000**	
Design Engineering/Administration Cost (15% Construction Cost)					**$87,784**	
Construction Engineering Costs/Administration (15% Construction Cost)					**$87,784**	
Contingency (20% Construction Cost)					**$117,045**	
TOTAL PROJECT COSTS					**$1,207,101**	

LEGEND

- CENTERLINE
- RIGHT OF WAY TAKE
- RIGHT OF WAY
- RETAINING WALL



MITIGATIONS:
+ ADD SB LEFT TURN LANE
+ RESTRIPE LEFT SB THROUGH LANE TO SHARED THROUGH-LEFT

COSTA MESA - INTERSECTION 10
SR-55 SB FRONTAGE ROAD AND PAULARINO AVENUE

Source: Irvine Business Complex, Vision Plan Traffic Fee Nexus Study, 2010

Appendix E: 1993 Agreement between City of Irvine and City of Costa Mesa

OFFICIAL COPY
CITY CLERKS OFFICE
CITY OF IRVINE

AGREEMENT

This Agreement for IMPLEMENTING THE IBC ROADWAY MITIGATION AND MONITORING PROGRAM ("Agreement") is made and entered into as of this 4th day of January, 1993 (the "Effective Date"), by and between the City of Irvine, a California charter city ("Irvine") and the City of Costa Mesa, a California municipal corporation ("Costa Mesa") (collectively referred to as the "Parties").

R E C I T A L S

A. Irvine has certified Environmental Impact Report 88-ER-0087 (the "IBC EIR"), as adequate and complete and adopted General Plan Amendment No. 7234-GA, and Zoning Amendment 88-ZC-0135 (collectively the "IBC Rezoning") to amend the land use designation and zoning in that portion of the City known as the Irvine Business Complex (the "IBC"), more specifically defined as that area depicted on Exhibit "A," attached hereto and incorporated herein by this referenced.

B. The IBC EIR analyzes the IBC Rezoning and concludes that the traffic mitigation measures contained therein (the "IBC Traffic Mitigation Measures") will adequately accommodate the traffic impacts which are anticipated to be generated by the IBC Rezoning.

C. The Parties hereto wish to monitor the traffic generated as a result of the IBC Rezoning to allow them to make timely decisions on the funding and implementation of the IBC Traffic Mitigation Measures.

C O V E N A N T S:

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties hereto agree as follows:

1. Mitigation Monitoring Program.

Irvine shall monitor the implementation of the IBC Traffic Mitigation Measures in the manner provided for in the mitigation monitoring program adopted by Irvine pursuant to City Council Resolution No. 92-162 (the "Mitigation Monitoring Program").

2. Implementation of the Development Deferral Program.

Irvine shall implement the development deferral program contained within in Appendix "B" of the IBC EIR (the "DDP") in either situation provided below:

(a) Irvine shall implement the DDP if the Mitigation Monitoring Program discloses that traffic generated by the IBC Rezoning has caused any arterial within Costa Mesa to exceed that arterial's applicable level of service ("LOS"). For the purpose of this Agreement an arterial's applicable LOS shall be that minimum LOS adopted for that arterial in the Circulation Element of the Costa Mesa General Plan as of the Effective Date. The DDP will remain in effect until such time as Irvine has devised and funded a mitigation measure which will reduce the IBC generated traffic on the arterial to the arterial's applicable LOS; or

(b) Irvine shall implement the DDP if, within three years prior to the scheduled

implementation of any IBC Traffic Mitigation Measure within Costa Mesa, Irvine determines that it will not have sufficient funds to actually construct that mitigation measure. The DDP will remain in effect until Irvine determines that it can fund the previously approved mitigation measure, or it devises a substitute mitigation measure acceptable to Costa Mesa and determines that the substitute mitigation measure can be funded.

3. Additional Mitigation.

In the event that the Mitigation Monitoring Program discloses that traffic generated as a result of the IBC Rezoning is having significant impact within Costa Mesa in excess of the traffic impacts discussed in the IBC EIR, Irvine and Costa Mesa shall meet and confer on the appropriate method to mitigate that significant impact (the "Supplemental Mitigation Measure(s)"). Irvine shall contribute its proportionate fair share of the cost of implementing the Supplemental Mitigation Measure(s). Irvine's proportionate fair share of the cost of the Supplemental Mitigation Measure(s) shall be based upon that percentage of IBC generated traffic which is actually attributable to the need for implementation of the Supplemental Mitigation Measure(s).

4. Analysis of Traffic Study Assumptions.

The City of Irvine will, at its own cost, hire a consultant to independently:

a. Conduct a traffic analysis of IBC EIR traffic assumptions after the completion of construction following issuance of building permits for 46 million gross square feet (approximately 40 million gross square feet existing today).

b. More specifically, all EIR traffic assumptions affecting the City of Costa Mesa will be analyzed which may include factors such as trip rates, TDM rates, and occupancy.

5. Covenant Not to Sue.

Each Party, and its respective agents, officers, employees, representatives, and assigns hereby agrees and covenants that this Agreement forever satisfies any past, present, or future claims which the Party, and its agents, officers, employees, representatives or assigns had, has or may have against the other Party or its agents, officers, employees, representatives, and assigns arising out of the IBC Rezoning and/or the preparation and certification of the IBC EIR. As a result, each Party hereto covenants not to file any future legal actions of whatever kind or nature against the other party regarding any claim in connection with the IBC Rezoning or the IBC EIR whether such claim is known or unknown, suspected or unsuspected, fixed or contingent.

6. Waiver of Civil Code Section 1542.

Each of the Parties hereto expressly waives any and all rights under Section 1542 of the California Civil Code or any Federal or State statutory right, rules or principles of common law

or equity or those of any other jurisdiction, government or political subdivision thereof, similar to Civil Code Section 1542 (hereinafter referred to "Similar Provision"). Thus, no Party hereto may invoke the benefit of Section 1542 or any Similar Provision in order to prosecute or assert in any manner any claim released hereunder. Section 1542 provides that:

> "a general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially effected his settlement with the debtor."

7. Integration.

This Agreement represents the entire understanding of the Parties hereto. No prior or contemporaneous oral or written understanding shall be of any force or effect with respect to those matters covered in this Agreement. Except as set forth in Sections 2(e) and 3(a) above, this Agreement may not be altered, amended, or modified except by mutual consent of the Parties hereto through a written instrument.

8. Attorneys Fees.

In the event that any Party hereto should bring any action, suit or other proceeding to remedy, prevent, or obtain relief from a breach of this Agreement or arising out of a breach of this Agreement, or contesting the validity of this Agreement or attempting to rescind, negate, modify, or reform this Agreement or any of the terms or provisions of this Agreement, the prevailing Party shall recover from such Party those reasonable attorneys fees and costs, including expert fees, incurred in each and every such

action, suit, or other proceeding, including any and all appeals or petitions therefrom.

9. California Law.

This Agreement shall be construed and interpreted both as to validity and performance of the Parties in accordance with the laws of the State of California.

10. Execution and Counterparts.

This agreement may be executed and delivered in any number of counterparts or copies ("Counterpart") by the Parties hereto.

11. Authority to Execute.

The persons executing this Agreement on behalf of the Parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said Parties and that by so executing this Agreement, the Parties hereto are formally bound to the provisions of this Agreement. Each person further acknowledges that he or she has obtained all necessary and legally required approvals for entry into this Agreement from legislative or governing boards and that it has adopted a resolution, motion, ordinance or other action pursuant to State law and its own bylaws or ordinances for approval of this Agreement.

12. Notices.

Every notice, demand, request, or other document or instrument delivered pursuant to this Agreement shall be in writing and shall either be personally delivered, sent by Federal Express or other reputable over-night courier, sent by facsimile transmission with the original subsequently delivered by any other

means authorized herein, or sent by certified United States mail, postage prepaid, return receipt requested, to the address set forth below for the applicable Party, or such other address as Parties may designate from time to time:

To Irvine: City of Irvine
City Hall
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92713
Attn: City Manager
cc: Director of Community Development
Telephone: (714) 724-6000
Fax: (714) 724-6075

To Costa Mesa: City of Costa Mesa
77 Fair Drive
P.O. Box 1200
Costa Mesa, CA 92626
Attn: City Manager
cc: Executive Director of Planning and Building
Telephone: (714) 754-5327
Fax: (714)

13. Severability clause.

The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their signature as appearing below.

CITY OF COSTA MESA

by _____
Mayor

ATTEST:

Eileen P. Rhinney
Clerk of the Council

APPROVED AS TO FORM:

Thomas Kathl 11-18-92
City Attorney

CITY OF IRVINE

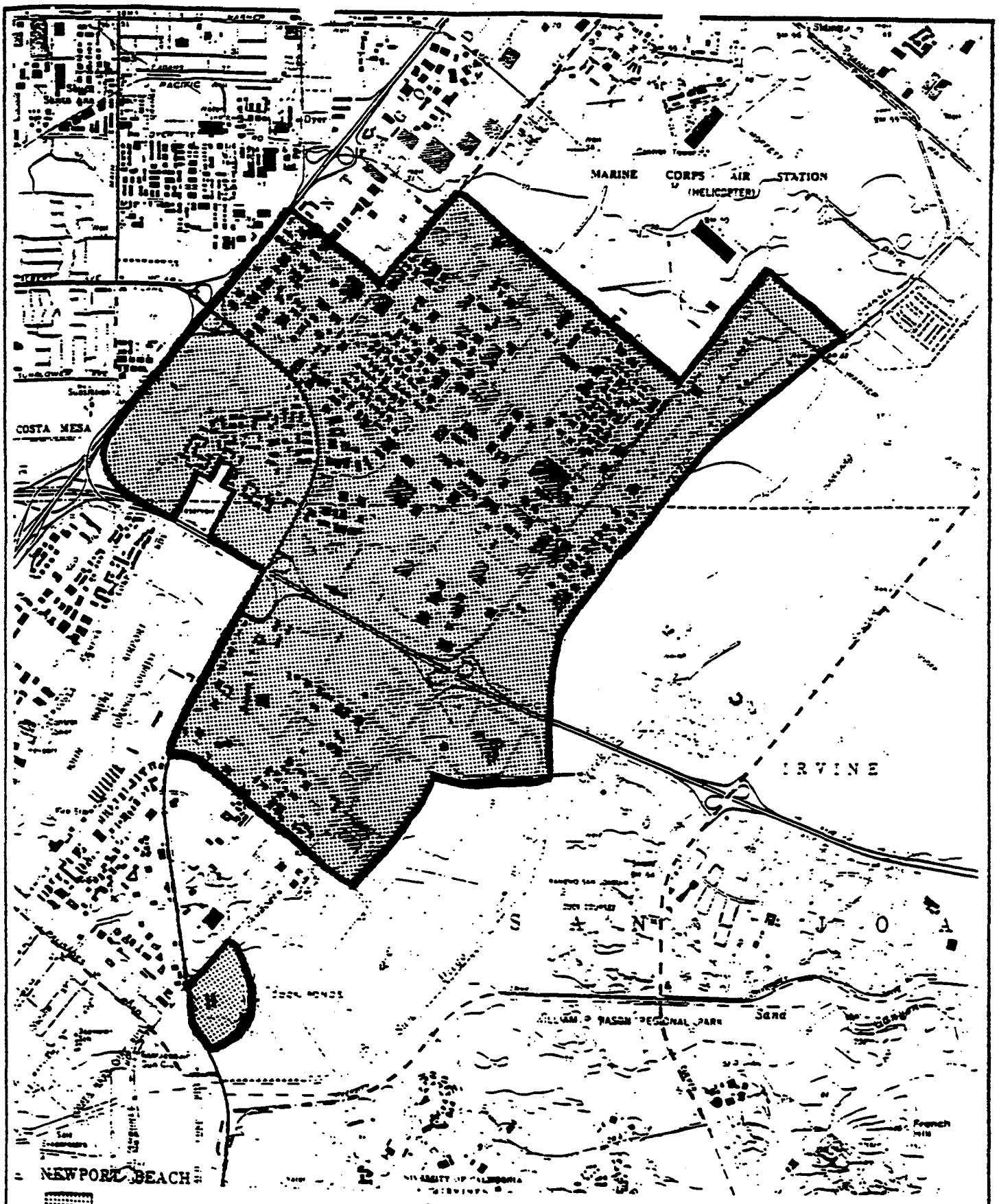
ATTEST:

by Larry Ann Sheridan
Mayor

Clerk of the Council

APPROVED AS TO FORM:

City Attorney



ATTACHMENT A

IRVINE BUSINESS COMPLEX

Site Vicinity Map

Robert Bein, William Frost & Associates

Appendix F: 2010 Settlement Agreement between City of Irvine and Caltrans District 12

TRAFFIC MITIGATION AGREEMENT

THIS AGREEMENT entered into and shall be effective on this 25th day of January, 2011 by and between the State of California, acting by and through its Department of Transportation, hereinafter referred to as "Department," and the City of Irvine, hereinafter referred to as "Agency." The Department and Agency are collectively referred to as the "Parties."

RECITALS

A. WHEREAS, on July 13, 2010 Agency certified the Final Environmental Impact Report (FEIR) for certain General Plan Amendments and Zone Change that are collectively known as the Irvine Business Complex (IBC) Vision Plan. That same evening, the Agency approved the General Plan Amendment for the IBC Vision Plan, and conducted the first reading for the Zone Change for the IBC Vision Plan. On July 27, 2010, the Agency conducted the second reading for the Zone Change for the IBC Vision Plan. The IBC Vision Plan is hereinafter referred to as the "Proposed Land Use Project." The Proposed Land Use Project is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek chaunel to the east, John Wayne Airport and Campus Drive to the south and State Route 55 (SR-55) to the west. The Proposed Land Use Project is bordered by the cities of Newport Beach, Santa Ana, Costa Mesa and Tustin. The Proposed Land Use Project allow for and/or contemplates (i) an increase in total units in the IBC from 9,401 units to 15,000 units, and (ii) a reduction of 2,715,062 square feet of nonresidential development (measured in office equivalency). In addition, a total of 2,038 density bonus units could be allowed (and are therefore assumed as part of the project) in accordance with state law, for a total of 17,038 units; and

B. WHEREAS, Mitigation Measure 13-4 of the FEIR ("MM 13-4") requires that an agreement between Parties be executed to address fair-share funding responsibilities for certain improvements within the jurisdiction and control of Department that will ultimately offset impacts to the State Highway System (SHS) as a result of the Proposed Land Use Project; and

C. WHEREAS, as set forth in the letters dated October 21, 2009 (Exhibit A) and November 12, 2009 (Exhibit B), each attached hereto and incorporated herein by reference, the Parties agree on the methodology used to (i) identify impacts to the SHS as a result of the Proposed Land Use Project and (ii) establish Agency's pro-rata share of funding responsibilities to offset and mitigate for impacts to the SHS as a result of the Proposed Land Use Project; and

D. WHEREAS, a Traffic Impact Study (TIS) identifies various impacts to the SHS as a result of the Proposed Land Use Project. The SHS facilities that the TIS identifies as being impacted by the Proposed Land Use Project are listed below. Each listed facility shall be referred to as an "Individual SHS Project". Each Individual SHS Project displays Agency's corresponding pro-rata funding percentage of the mitigation responsibility, based on the methodology described in Exhibit A and Exhibit B:

- Northbound Interstate (I)-5 mainline: Jamboree to Newport (1.8% fair-share)
- Northbound I-5 mainline: Newport to State Route (SR)-55 (1.7% fair-share)
- Southbound I-5 mainline: Jamboree to Tustin Ranch (2.3% fair-share)
- Southbound I-5 mainline: Tustin Ranch to Red Hill (2.3% fair-share)
- Southbound I-5 connector: SR-55 to southbound I-5 (2.3% fair-share)
- Northbound I-405 mainline: Jamboree to MacArthur (2.2% fair-share)
- Northbound I-405 off-ramp: Culver (1.8% fair-share)
- Northbound I-405 off-ramp: MacArthur (7.3% fair-share)
- Northbound I-405 on-ramp: MacArthur (3.8% fair-share)
- Southbound I-405 mainline: Jamboree to MacArthur (2.9% fair-share)
- Southbound I-405 off-ramp: Jamboree (21.6% fair-share)
- Southbound I-405 on-ramp loop: Bristol (7.5% fair-share)
- Southbound I-405 connector: I-405 to southbound SR-55 (3.3% fair-share)
- Northbound SR-55 mainline: I-405 to MacArthur (3.3% fair-share)
- Northbound SR-55 mainline: MacArthur to Dyer (3.0% fair-share)
- Northbound SR-55 mainline: Dyer to Edinger (2.7% fair-share)
- Northbound SR-55 off-ramp: Baker (1.1% fair-share)
- Northbound SR-55 direct on-ramp: Dyer (3.6% fair-share)
- Southbound SR-55 mainline: I-405 to MacArthur (4.8% fair-share)
- Southbound SR-55 mainline: MacArthur to Dyer (4.1% fair-share)
- Southbound SR-55 on-ramp: Baker (3.1% fair-share)
- Southbound SR-55 loop on-ramp: MacArthur (8.0% fair-share)
- Northbound SR-73 on-ramp: Campus (6.1% fair-share)
- Southbound SR-73 off-ramp: Jamboree (4.0% fair-share); and

E. WHEREAS, the Parties have agreed upon a feasible improvement at each Individual SHS Project location that provides adequate mitigation of the associated Proposed Land Use Project impacts; and

F. WHEREAS, the Parties have agreed that Agency's total funding commitment to offset the Proposed Land use Project impacts on SHS facilities will not exceed the amount of $7,025,962 (Total Fair-Share Contribution), as more partieularly set forth in Exhibit C attaehed hereto; and

G. WHEREAS, Agency intcnds to adopt a fee program imposed on future development within the IBC ("IBC Transportation Fee Program" or "Program") that, among other things, will collect the Total Fair Share Contribution; and

H. WHEREAS, the Total Fair Share Contribution constitutes a percentage of the total amount forecasted to be collected through the IBC Transportation Fee Program; and

I. WHEREAS, Agency will segregatc, and devote solely to the payment of the Total Fair Share Contribution in accordance with this Agrcement, a percentage of thc incoming Program funds equivalent to the ratio of the Total Fair Share Contribution to the remainder of the Program funds ($7,025,962 / Total Fee Program Amount at Timc of Segregation) of every dollar eollectcd through the IBC Transportation Fee Program (the "Segregated Amount"). This ratio will be adjusted as funds are expended from cither the Segregated Amount and/or the remainder of the Program funds; and

J. WHEREAS, the Parties have agreed that Agency will not contribute any funding towards improvcment of the Individual SHS Project identified as Northbound 1-405 off-ramp at Culver bccause thc Agency will mitigate this location as an intcrsection impact idcntified in the FEIR and TIS; and

K. WHEREAS, Agency now desircs to fulfill the requirements of MM 13-4.

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hercby agrce as follows:

AGREEMENT

1. Parties agree that Agency's total fair share contributions toward Individual SHS Projects shall not exceed the Total Fair-Share Contribution amount. For so long as Agency's cumulative contributions toward the Individual SHS Projects remains below Agcncy's Total Fair-Share Contribution amount, Agency shall be required to pay its fair share contribution, up to the then cxisting total of the Segregatcd Amount, to each Individual SHS Projcct.

2. Subject to thc conditions and limitations on thc amount and timing of funding set forth in tbis Agreement, thc Partics agree to execute a separatc Contribution Cooperativc Agreement authorizing the transfer of funds for each and every Individual SHS Project at least 180 days prior to scheduled date of commencement of construction. So long as the Contribution Cooperativc Agreement(s) is(are) fully eonsistent with the terms of this Agreement, Ageney authorizes the City Manager to exeeute Contribution Cooperative Agreement(s) on behalf of Ageney.

3. Parties agree to inelude the following general conditions when developing each Contribution Cooperative Agreement: (i) provide Agency with 60 ealendar days to pay invoiee, once it has been received, (ii) each invoice from Department will bill in the form of a lump sum, (iii) if, at the time the Contribution Cooperative Agreement is being prepared, the Segregated Amount held by Agency is less than the anticipated fair share eontribution for an Individual SHS Project, the Contribution Cooperative Agreement will consider alternative billing arrangements such that Agency may remit to Department additional Segregated Amounts within a reasonable time as additional fees under the IBC Transportation Fee Program are paid to the Agency, and (iv) if, following Agency's payment of a fair share contribution toward an Individual SHS Project, Department's plans for eonstruction of said Individual SHS Project are terminated or delayed for a period exceeding one year, Department shall refund Agency's fair share contribution toward said individual SHS Project; provided however, that said refund shall be without prejudice to Department's ability to re-invoice Agency for a fair share eontribution to said Individual SHS Project if and when construetion plans for said project are re-activated.

4. If Agency's fair share contribution to an Individual SHS Project would cause Agency's cumulative contributions under this Agreement to exceed the Total Fair Share Contribution amount, then Agency shall only be responsible to pay such amount as would result in the cumulative contributions under this Agreement equaling the Total Fair Share Contribution amount.

5. If, by December 31, 2040, the Department fails to utilize any portion of Agency's Total Fair-Share Contribution, those remaining funds shall be released from the commitments of this Agreement.

6. Agency's Total Fair-Share Contribution shall fully satisfy Agency's obligation to participate in the mitigation of traffic impacts per MM 13-4 of the FEIR. Agency will not be required to fund any additional improvements that may arise from the Proposed Land Use Project.

7. Department shall use the Total Fair-Share Contribution, and each and every portion thereof, for the purpose of mitigating impacts to the SHS as a result of the Proposed Land Use Project. Department may allocate a portion of funds towards improvements that have not yet been identified, but would provide equal or greater mitigation value than one or more of the Individual SHS Project(s), identified in Exhibit C of this Agreement, to offset the Proposed Land Use Project impacts.

8. Department shall advertise, award and administer (AAA) the eonstruction contract for eaeh and every projeet that utilizes Total Fair-Share Contribution funds.

9. Department shall not use Total Fair-Share Contribution funds for projeets off the SHS, unless a eooperative agreement ("Cooperative Agreement") is first developed and exeeuted by the Parties that (i) elearly demonstrates a nexus, (ii) transfers AAA responsibilities, (iii) addresses maintenanee responsibilities, and (iv) provides all

necessary and standard language including indemnification, document retention, wage requirements, and other associated commitments.

10. This Agreement shall expire upon the earliest of the following occurrences: (i) when Department has expended the entire Total Fair-Share Contribution; (ii) when all nnspent Total Fair-Share Contribution funds are returned to Agency; or (iii) on December 31, 2040.

11. All notices, transmittals of doeumentation and other writings required or permitted to be delivered or transmitted to either of the Parties under this Agreement shall be personally served or deposited in a United States mail depository, first class postage prepaid, and addressed as follows:

If to the Agency: City of Irvine
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623
Attention: City Manager

If to the Department: California Department of Transportation
District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612
Attention: Deputy District Director, Transportation
Planning and Local Assistance

All such notices and communications shall be deemed to have been duly given when delivered by hand, if personally delivered. Except where service is by registered or certified mail, return reeeipt requested, service of any instrument or writing shall be deemed completed forty-eight (48) hours after deposit in the United States mail depository.

12. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, other than the Parties hereto and their respective authorized successors and assigns, any legal or equitable right, remedy or claim under or in respect to this Agreement or any of the provisions contained herein. This Agreement and each and every eondition and provision hereof are intended to be for the sole and exclusive benefit of the Agency and the Department, and their respective authorized successors and assigns, and for the benefit of no other person or entity.

13. This Agreement shall be governed by and construed in accordance with the laws of the State of California, and any dispute arising from or related to the interpretation or performance of this agreement shall be commenced in the Superior Court of the State of California, County of Orange.

14. No failure on the part of either Party hereto to insist upon or demand the strict performance by the other Party of any covenant, term, condition or promise of this Agreement, or to exercise any right or remedy as a result of any breach of the Agreement, shall constitute a continuing waiver of any such breach or of any such covenant, term, condition, promise, right or remedy. No waiver of any breach shall in any way affect, alter or modify this Agreement, but each and every covenant, term, condition and promise of this Agreement shall continue in full force and effect. No single or partial exercise of any right, remedy, power or privilege under this Agreement shall preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege under this Agreement.

15. Nothing in this Agreement shall be construed to make the Parties joint ventures or partners, or to create any relationship of principal and agent, and the Parties specifically disavow any such relationship between one another.

16. This Agreement has been negotiated at arms' length between persons sophisticated and knowledgeable in the matters addressed herein, and both Parties have had the opportunity to consult with legal counsel of such party's choosing regarding this Agreement. Accordingly, any rule of law (including California Civil Code § 1654) or legal decision that would require interpretation of this Agreement against the drafter hereof is not applicable and is waived.

17. This Agreement is intended by the Parties as a final expression of their agreement and is intended to be a complete and exclusive statement of the agreement and understanding of the Parties hereto in respect to the subject matter contained herein. There are no restrictions, promises, warranties or undertakings relating to the subject matter of this Agreement, other than those set forth or referred to in this Agreement.

18. Each officer of the Department and the Agency affixing his or her signature below thereby warrants and represents that he or she has the full legal authority to bind his or her respective party to all of the terms, conditions and provisions of this Agreement; that his or her respective party has the full legal right, power, capacity and authority to enter into this Agreement and perform all the obligations herein; and that no other approvals or consents are necessary in connection therewith.

19. Neither this Agreement nor any provision hereof may be changed, waived, discharged or terminated, except upon the duly authorized execution of a subsequent agreement in writing executed by all of the Parties.

20. Neither Agency nor any officer or employee thereof is responsible for any injury, damage, or liability occurring hy reason of anything done or omitted to be done by Department and/or its agents under or in counection with any work, authority, or jurisdiction conferred upon Department under this Agreement. Department and/or its agents shall fully defend, indemnify and save harmless Agency and all of its officers and employees from all claims, suits, or actions or every name, kind and description brought forth under, but not limited to, tortious, eontraetual, inverse eondemnation, or

other theories or assertions of liability occurring by reason of anything done or omitted to be done by Department and/or its agents under this Agreement.

21. Neither Department nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by Agency and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon Agency under this Agreement. Agency and/or its agents shall defend, indemnify and save harmless Department and all of its officers and employees from all claims, suits, or actions or every name, kind and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by Agency and/or its agents under this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as set forth below.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By:_____
Cindy Quon
Director, District 12

CITY OF IRVINE

By:_____
Sukhee Kang
Mayor

APPROVED AS TO FORM AND PROCEDURE:

By:_____
Deputy Attorney,
Department of Transportation

ATTEST:

By:_____
City Clerk

APPROVED AS TO FINANCIAL TERMS AND POLICIES:

By:_____
Headquarters Accounting Administrator,

APPROVED AS TO FORM:

By:_____
City Attorney

Exhibit A

(October 21, 2009 letter)

Public Works Department www.cityofirvine.org
City of Irvine, 1 Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 (949) 724-6000

October 21, 2009

Ryan Chamberlain
Caltrans District 12
3337 Michelson Drive Suite 380
Irvine, CA 92612-8894

Dear Mr. Chamberlain:

This letter is to follow up on our recent follow up discussions regarding the proposed methodology used for analyzing the traffic impacts of the proposed project in the IBC Vision Plan ("Project") on the Caltrans facilities in the project study area. Based on our discussion and follow up phone call, the city is proposing to use the following two-tiered approach, revised traffic analysis methodology and the indicated fair share formula instead of previously indicated methodology documented in our October 15, 2009 letter:

1. Evaluate freeway mainline segments and ramps based on peak hour V/C ratios. If the V/C ratio indicates LOS F for a given freeway mainline segment or ramp, then the Highway Capacity Manual (HCM) methodology indicated below as the second step of this two tiered approach is not needed for that freeway mainline segment or ramp.

2. Apply the HCM methodology to determine the LOS. This second step will only be taken for a freeway mainline segment if the V/C ratio analysis indicates that the mainline segment operates at LOS D/E cusp (0.89) and if the Project contributes greater than 200 vehicle trips per hour (based on the comparison of no-project and with-project V/C ratios) to a freeway mainline segment. This second step will only be taken for a ramp if the V/C ratio analysis indicates that the ramp operates at LOS D/E cusp (0.89) and the Project contributes greater than 30 vehicle trips per hour to a ramp.

Traffic Analysis Methodology

Level of Service (LOS) Targets:

Freeway Mainline Segments: A significant impact occurs when:

a. The segment LOS is better than D/E cusp (<0.89) without the project and the project adds additional trips that degrades the segment beyond the LOS D/E

cusp and the project contributes more than 200 vehicles per hour once beyond the D/E cusp, or

b. The segment is at LOS D/E cusp or worse (>=0.89) before project and the project contributes greater than 200 vehicle trips per hour.

Off-Ramps and On-Ramps: A significant impact occurs when:

a. The ramp LOS is better than D/E cusp (<0.89) without the project and the project adds additional trips that degrades the segment beyond the LOS D/E cusp and the project contributes more than 30 vehicles per hour once beyond the D/E cusp, or

b. The ramp is at LOS D/E cusp or worse (>=0.89) without the project and the project contributes greater than 30 vehicle trips per hour.

Ramp Intersections:

- Both the Intersection Capacity Utilization (ICU) analysis methodology and the HCM intersection analysis methodology will be applied to determine intersection levels of service. The performance criteria at the ramp intersections will be based on the performance criteria of the City in which the intersection is located. A significant impact occurs when a given ramp intersection is at an unacceptable LOS (based on either the ICU or HCM analysis results) and the project contribution exceeds impact threshold applied by the City in which the intersection is located, based on the comparison of no-project and with-project ICU values.

Equitable Share Responsibility

Consistent with recently approved traffic studies for General Plan Amendment and Zone Changes relating to Planning Areas 1, 5B, 6, 8, 9, 18, 33, 34, 39 and 40, and Orange County Great Park, the City will conduct the equitable share responsibility toward feasible improvements for freeway segments and ramps based on the following formula:

$$\text{Equitable Share Responsibility} = \frac{\text{Future with Project} - \text{Future No Project}}{\text{Future with Project}}$$

The additional trips added that bring any segment to the D/E cusp would not need to be considered when calculating fair share responsibility toward feasible improvements. Only those additional trips added once beyond the D/E cusp would be used for the equitable share calculations.

Upon the completion of our traffic analysis, we will work closely with your staff to identify feasible improvements for the impacted facilities. We appreciate your time in

working closely with us on the proposed methodologies. Please feel free to contact me at (949) 724-7526 if you have any questions regarding this letter.

Sincerely,

Shohreh Dupuis
Manager of Transit and Transportation

cc: Christopher Herre, Caltrans District 12
James Pinheiro, Caltrans District 12
Jose Hernandez, Caltrans District 12
Charlie Larwood, OCTA

Exhibit B

(November 12, 2009 letter)

DEPARTMENT OF TRANSPORTATION
District 12
3337 Michelson Drive, Suite 380
Irvine, CA 92612-8894
Tel: (949) 724-2267
Fax: (949) 724-2592

Flex your power!
Be energy efficient!

November 12, 2009

Shohrch Dupuis
City of Irvine
Public Works Department
One Civic Center Plaza
Irvine, California 92623

File: IGR/CEQA
SCH #: 2007011024
Log #: 1817Q
I-405, I-5, SR-55,
SR-73, SR-261

Snbject: Irvine Busiuess Complex Vision Plan and Mixed Use Overlay Zoning Code

Dear Ms. Dupuis:

Thank you for providing us with the updated information on the two-tier approach and significance threshold for the Traffic Impact Study and the methodology for fair share calculation for the subject project.

The Dcpartment of Transportation (Department), District 12 is offering the following comments:

1. The Department agrees with the two tier traffic analysis approach provided the following assumptions are correct.

   A. Freeway mainline segments and ramps will be evaluated using ICU methodology to calculate peak hour V/C ratios. If the V/C indicates LOS F for a given freeway mainline segment or ramp, HCM methodology would not need to be applied to that freeway mainline segment or ramp.

   B. HCM analysis would be performed when:
      a. A mainline segment operates at LOS D/E cusp (0.89) or worse, but better than LOS E/F cusp (1.00), and the project contributes greater than 200 vehicles per hour (based on the comparison of no-project and with projcct V/C ratios) to that mainline segment; or
      b. A ramp operates at LOS D/E cusp (0.89) or worse, but better than LOS E/F cusp (1.00), and the project contributes greater than 30 vehicles per hour (based on the comparison of no-project and with project V/C ratios) to that ramp.

<u>On LOS Targcts:</u>

2. The Departments agrees with that freeway mainline segments, ramps, and ramp intersections thresholds outlined in your October 21, 2009 letter. Should a significant impact occur to any State-owned facilities, measures to reduce impacts should be included in the CEQA analysis. We encourage the City to meet with our Local Developmcnt/Intergovernmental branch to discuss potential mitigation measure that could be used for this project.

On Equitable Share Responsibility

3. The Department concurs that the formula provided in your letter dated October 21, 2009 should be used to calculate fair share contributions for this project. The additional trips added that bring any segment to the D/E cusp would not need to be considered when calculating fair share responsibility toward feasible improvements. Only those additional trips added once beyond the D/E cusp would be used for the equitable share calculations.

Thank you again for the information provided and we look forward to continuing working with the City to finalize the traffic analysis, potential fair share calculation and feasible improvements identification. If you have any questions or need to contact us, please do not hesitate to call me at (949) 724-2899.

Sincerely,

RYAN CHAMBERLAIN
Deputy District Director, Planning

cc: James Pinheiro, Deputy District Director – Maintenance/Operations
Chris Herre, Branch Chief, Local Development/Intergovernmental Review

Exhibit C

(Improvement Funds)

Potential Projects to Mitigate IBC Vision Plan's Traffic Impacts to State Facilities

Impacts					Potential Mitigation Projects				Cost Estimate	City Fairshare	City Comment
Route	Direction	Facility Type	Location	P2039 Project Fair Share	Description	Location	Agency	Notes			
I-5	NB	Mainline	Jamboree to Newport	1.8%	Add 1 GP lane between Jamboree and Newport Blvd	Jamboree to Newport Blvd		Project would mitigate impacts at Jamboree to Tustin Ranch, Tustin Ranch to Redhill, and Redhill to Newport. Percentage represents the average of 1.8%, 1.9% and 1.8% for those 3 segments respectively (M2 project)	$20,400,000	$374,000	
			Newport to SR-55	1.7%	Widen connector to two lanes; An additional GP lane on SR-55 to 17th St.	NB I-5 to NB SR-55 connector	OCTA SR-55 feasibility study		$7,200,000	$122,400	
	SB	Mainline	Jamboree to Tustin Ranch	2.3%	Add a second aux lane	Tustin Ranch - Jamboree		Caltrans PSR, also including widening SB I-5 off-ramp at Jamboree	$2,924,000	$67,252	
			Tustin Ranch to Rod Hill	2.3%	Add 1GP lane between Tustin and Jamboree	Tustin Ranch - Jamboree		M2 project	$6,720,000	$154,560	
		Fwy Connector		2.3%	Fwy-to-Fwy connector ramp metering	SB SR-55 to SB I-5 connector			$850,000	$19,550	
I-405	NB	Mainline	Jamboree to MacArthur	2.2%	Add a second aux lane	Jamboree to MacArthur			$9,000,000	$198,000	
		Off-ramp	Culver off-ramp	1.8%	Add aux lane from Jeffrey to Culver, provide 2 lane exit and an additional right-turn lane at intersection				$15,900,000	$0	No City fair-share contribution towards aux lane project from Jeffrey to Culver. However, City is committed to implementing intersection improvements at a cost of $359,000.
			MacArthur off-ramp	7.3%	Add a second exit ramp	MacArthur off-ramp			$1,250,000	$91,250	
		On-ramp	MacArthur on-ramp	3.8%	Widen ramps to 4 lanes at entrance that merge to 3 lane at ramp meter	MacArthur on-ramp			$2,250,000	$85,500	
	SB	Mainline	Jamboree to MacArthur	2.9%	Add 2nd aux lane from MacArthur to Jamboree	Jamobree to MacArthur			$9,000,000	$261,000	
		Off-ramp	Jamboree off-ramp	21.8%	Widen intersection to provide 2 left turn and 3 right turn lanes with 500 ft storage	Jamboree off-ramp			$1,500,000	$324,000	
		On-ramp	Bristol Loop on-ramp	7.5%	Extend left lane to ramp mater and upgrade ramp metering signal hardware	Bristol loop on-ramp			$2,100,000	$157,500	
		Fwy Connector		3.3%	Fwy-to-Fwy connector ramp metering	SB I-405 to NB SR-55 connector			$850,000	$28,050	
SR-55	NB	Mainline	I-405 to MacArthur	3.3%	Add one GP lane and one Aux lane	I-405 to MacArthur		M2 project	$23,863,636	$787,500	
			MacArthur to Dyer	3.0%	Add one GP lane and one Aux lane	MacArthur to Dyer		M2 project	$21,477,273	$644,318	
			Dyer to Edinger	2.7%	Add one GP lane and one Aux lane	Dyer loop on-ramp to Edinger		M2 project	$36,181,818	$1,030,909	
		Off-ramp	Baker St off-ramp	1.1%	Add a right turn lane at intersection	Baker St. Off-ramp			$500,000	$5,500	
		On-ramp	Dyer Rd Direct on-ramp	3.6%	Increase storage capacity at on-ramps	Dyer Rd Direct On-ramp			$1,300,000	$46,800	
	SB	Mainline	I-405 to MacArthur	4.8%	Add ons GP lane and one Aux lane	MacArthur to I-405		M2 project	$23,863,636	$1,145,455	
			MacArthur to Dyer	4.1%	Add one GP lane and one Aux lane	MacArthur to Dyer		M2 project	$21,477,273	$680,568	
		On-ramp	Baker St. on-ramp	3.1%	Increase storage capacity at on-ramps between merging point and ramp meter	Baker St. On-ramp			$1,000,000	$31,000	
			MacArthur loop on-ramp	8.0%	Widen on-ramps	MacArthur to I-405	Santa Ana / Caltrans	Santa Ana is finalizing a PR with Caltrans Design Branch	$4,225,000	$338,000	
SR-73	NB	On-ramp	Campus Dr. on-ramp	6.1%	Widen on-ramp to 3 lanes and upgrade ramp metering signal and hardware	Campus Dr. on-ramp			$1,850,000	$112,850	
	SB	Off-ramp	Jamboree off-ramp	4.0%	Add a 3rd lane from past gore point to join with left lane pocket at Jamboree	Jamboree off-ramp			$3,000,000	$120,000	
									$220,602,636	**$7,025,952**	**3.18%**

Total Fair Share Contribution towards freeway facilility improvements $7,025,962

Appendix G: Details of Developments considered for 2015 Update

IBC TRAFFIC IMPROVEMENT FEE ANALYSIS

July 31, 2010 to July 31, 2015

IBC Projects Paid With Cash Receipts (CR)

ID	Project Name	IBC Project #	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
CR-1	Edward Life Sciences	2	1	Edwards	1	Existing	Cash Receipts	10/22/2012					81,165			Industrial to Office Conversion				Reconciliation of project from Industrial to Office uses. Cash receipt for Case #00541392-PPA Paid in two instalments
CR-2	Edward Life Sciences	2	1	Edwards	1	Existing	Cash Receipts	10/22/2012					957	483		Conversion into Office and Industrial				Reconciliation of project from Industrial to Office uses. Cash receipt for Case #00541392-PPA
CR-3	Edward Life Sciences	2	1	Edwards	1	Existing	Cash Receipts	6/27/2014					97,664	15,688		Office and Industrial				#00593571-CNEW for new 4-story building
									0	0	0	0	179,786	16,171	0					

IBC Projects With Pre-Paid IBC Transportation Fees

ID	Project Name	IBC Project #	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
Pre-1	Element Hotel (Ext. Stay Hotel)	49	17662	Armstrong	1	Exisitng	Pre-Paid	6/27/2012		122						Ext. Stay Hotel			0	#00547885-PIBC
Pre-2	Kelvin Apartments	364	2852	Kelvin	1	Exisitng	Pre-Paid	6/27/2012	194							Residential	156	38	194	#00547263-PIBC; Approval: February 2011
Pre-3	Equity I	17	2501	Alton	2	Under Const.	Pre-Paid	6/5/2014	190							Residential	190		190	00578892-RNA; Paid at Planning Counter
Pre-4	Equity II	529	16931	Millikan	2	Under Const.	Pre-Paid	6/5/2014	154							Residential	154		154	00578892-RNA; Paid at Planning Counter
Pre-5	Homewood Suites (Ext.-Stay Hotel)	608	17370	Red Hill	2	Under Const.	Pre-Paid	6/30/2014		161		3,224				Reail and Ext. Stay Hotel			0	#00609316-PIBC - Vacant Parcel
Pre-6	2801 Kelvin	361	2801	Kelvin	2	Under Const.	Pre-Paid	12/12/2014	381							Residential	305	76	381	#00645304-PIBC; Approval: June 2013
Pre-7	Metropolis	107	2500	Main	2	Under Const.	Pre-Paid	12/12/2014	457							Residential	368	89	457	#00609447-PIBC; Approval: February 2013
Pre-8	Elements (Phase 1)	56 & 97	2601	Campus	3	Approved	Pre-Paid	12/12/2014	700							Residential	560	140	700	#00609448-PIBC; Approval: December 2014
								TOTAL	2,076	283	0	3,224	0	0	0		1,733	343	2,076	

IBC Transportation Fees Paid via Permits Issued

ID	Project Name	IBC Project #	Address	Street	Status Code	Development Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
Permit-1	N/A	16	2481	Alton	1	Existing	Paid	7/12/2010							224	Industrial to Warehouse			0	224 SF Enclosure Addition; #00504865-SBP
Permit-2	Gillette Building	572	17062	Murphy	1	Existing	Paid	10/8/2010					1,763			Office			0	Intensification of 1,763 SF from industrial to office; #00510330-SBPT
Permit-3	Von Karman Center	664	16782	Von Karman	1	Existing	Paid	12/16/2010					943			Office			0	#00514777-SBPT
Permit-4	Edwards Life Sciences	2	1212	Alton Pkwy	1	Existing	Paid	3/8/2011							540	Industrial to Warehouse			0	#00519702-SBP
Permit-5	Irvine Family Spa	64	2332	Barranca	1	Existing	Paid	3/30/2011					10,903			Office			0	Conversion of industrial to office (10,903 SF); #00521226-SBPT
Permit-6	Edwards Life Sciences	2	1452	Alton	1	Existing	Paid	6/9/2011					140			Office			0	Addition of 140 SF for facade/lobby/toliet remodel on north bldg elevation for 1452 Alton; #00524653-SBP

1. Demolition Credits are based on a specific fee rate assumed back in July, 2005. Actual credit based on future issuance date of demolition permit may be less.

ID	Project Name	IBC Project	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
Permit-7	Equus & Innova Corporate Ctr	674	17352	Von Karman	1	Existing	Paid	7/11/2011					22,636			Industrial to Office			0	Plans consist of: (1) add 253 SF entry element to 1st floor (office - 2 conference rooms); (2) add 7,577 SF to 2nd floor (office); (3) convert 14,806 SF of industrial (manuf/WH) to office use on 2nd floor mezzanine. Overall bldg SF increases from 91,534 SF to 99,364 SF. IBC fees due = $ 85,619.75; #00527059-SBP
Permit-8	Edwards Life Sciences	2	1	Edwards	1	Existing	Paid	9/20/2011							1,545	Industrial to Warehouse			0	1,545 SF addition of industrial space; #00531427-SBP
Permit-9	MacArthur Medical Campus	609	1400	Reynolds	1	Existing	Paid	10/4/2011					3,000			Industrial to Office			0	Converting a total of 3,751 SF of existing med off use into lt manuf uses w/in the bldg in order to expand 3,000 square feet (call center office); #00532276-SBPT
Permit-10	N/A	447	2900	McCabe	1	Existing	Paid	11/18/2011					2,017			Industrial to Office			0	2,017 SF conversion of warehouse to office- 2,017 SF x $3.95/SF = $7,967.15 due; #00535026-SBPT
Permit-11	E-Bogu Martial Arts School	72	1581	Browning	1	Existing	Paid	1/17/2012					897	775		Industrial to Office			0	Converting 897 SF of ind to off use & adding 775 SF ind. IBC fees due = $4,705.65; #00536633-SBP
Permit-12	N/A	618	1672	Reynolds	1	Existing	Paid	3/14/2012					1,420			Industrial to Office			0	Convert 1,239 SF of existing ind to office use, add 181 SF of new office SF for an improved entrance/lobby area. IBC fee due = $5,684.35; #00540939-SBP
Permit-13	N/A	456	1400	McGaw	1	Existing	Paid	4/10/2012					1,148			Industrial to Office			0	Convert 175 SF of WH to off & 798 SF of existing WH to manuf use at 1400 McGaw. Existing LU: 2,670 SF off & 10,830 SF WH & 126 SF ZP. Proposed: 2,845 SF off, 798 SF manuf, 9,857 SF WH & 9 SF ZP. IBC fees due = $691.25; #00542555-SBPT
Permit-14	N/A	455	1392	McGaw	1	Existing	Paid	4/25/2012							715	Industrial to Warehouse			0	#00543308-SBPT
Permit-15	Edwards Life Sciences	2	1402	Alton	1	Existing	Paid	7/19/2012					350			Office			0	Add 350 SF office on 2nd fl by extending slab near west stairway at 1402 Alton; #00549377-SBP
Permit-16	N/A	677	17462	Von Karman	1	Existing	Paid	11/13/2012							9,840	Industrial to Warehouse			0	Construction of 9,840 warehouse mezzanine. Increases Industrial from 80,754SF to 90,594SF and reduces ZP from 19,694SF to 16,287SF. ;#00558205-SBPT
Permit-17	N/A	385	1822	Langley	1	Existing	Paid	2/5/2013					3,273			Industrial to Office			0	Building previously destroyed by fire, and rebuilt as follows: 1st floor: 2,708 SF office, 8,781 SF manuf., 1,831 SF ware; 2nd floor: 950 SF office, 3,931 SF ware. Total building is 18,201 SF. #00562535-SBP
Permit-18	N/A	525	16871	Millikan	1	Existing	Paid	2/8/2013					600			Industrial to Office			0	#00564394-SBPT
Permit-19	3M Dental Products	478	2111	McGaw	1	Existing	Paid	3/20/2013							6,752	Industrial to Warehouse			0	Approved assuming concurrent request for 6,752 SF warehouse mezzanine addition would be built. Mezzanine permit was never pulled.; #00567314-SBP
Permit-20	N/A	445	2569	McCabe	1	Existing	Paid	4/2/2013					207			Office			0	Added 207 SF office to a new total of 23,687 SF;#00568649-SBP
Permit-21	Edwards Life Sciences	2	1402	Alton	1	Existing	Paid	7/10/2013					5,881			Industrial to Office			0	Conversion of 5,881 SF of manufacturing space to office space at 1402 Alton; #00576671-SBPT
Permit-22	Glidewell Implant R&D Facility	245	2181	Dupont	1	Existing	Paid	9/12/2013					2,950			Industrial to Office			0	Approved addition of 2,950 SF office on 2nd floor mezzanine.; #00582419-SBP
Permit-23	My Montesorri Childcare	20	16601	Armstrong	1	Existing	Paid	10/21/2013					24,457			Industrial to Childcare (Office)			0	My 1st Montessori Preschool; CUP approved conversion of existing 35,337 SF off/ind bldg to 24,457 SF childcare facility (office trip generator); #00586597-SBP
Permit-24	N/A	198	17992	Cowan	1	Existing	Paid	12/27/2013							800	Industrial to Warehouse			0	Per 00588730-CASF, 800 SF warehouse mezzanine addition; #00594393-SBP

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ID	Project Name	IBC Project	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
Permit-25	N/A	700	18651	Von Karman	1	Existing	Paid	12/30/2013					367			Office			0	New 367 SF office within the building; #00588479-CTIS
Permit-26	Hilton Garden Inn Hotel	565	2381	Morse	1	Existing	Paid	2/13/2014		168						Ext. Stay Hotel			0	The demolition of the entire 30,000 SF office building was issued in Feb 2014. The SF FEE CREDIT for this building equated to $171,600 or 30,000 SF; #00597988-SBPF
Permit-27	N/A	65	2400	Barranca	1	Existing	Paid	2/14/2014					20,508			Industrial to Office			0	OFFICE TI WITH A OCCUPANCY. NEW INTERIOR ELEVATOR WITH ROOF PENETRATION. Tenant: Emerson Process Manangement; #00597152-SBPT; 00590188-CTIS
Permit-28	N/A	220	17392	Daimler	1	Existing	Paid	5/9/2014					2,979			Industrial to Office			0	Convert 2,979 SF of Industrial to Office;#00604424-SBPT
Permit-29	Spellbound	297	17192	Gillette	1	Existing	Paid	5/28/2014					1,170			Industrial to Office			0	Per #00602164-CTI, an office TI to increase Office to 3,168 SF and Industrial to 11,645 SF; #00606287-SBPT
Permit-30	Edwards Life Sciences	2	1431	McGaw	1	Existing	Paid	6/2/2014					22,050		5,570	Office and Warehouse			0	Replacement 27,620 SF BRC bldg approved for 22,050 SF Off & 5,570 SF WH (ventilated animal penning area), demolition of bldg processed separately; #00603745-SBP
Permit-31		700	18651	Von Karman	1	Existing	Paid	7/7/2014						23,807		Industrial to Manufacturing			0	#00593637-CASF: 23,807 SF manf. mezzanine addition; AND conversion of 20,641 SF warehouse to manuf.; #00609631-SBP
Permit-32	Display It	21	16680	Armstrong	1	Existing	Paid	8/15/2014					2,469			Industrial to Office			0	Permit coverts 2,469 SF of Industrial use to Office use, thereby increasing office from 8,484 SF to 10,953 SF. The remaining square footage is 73,903 SF of Industrial use; #00613451-SBP
Permit-33	Douglas Plaza - Tower 17	703	18881	Von Karman	1	Existing	Paid	10/20/2014					123			Office			0	Accessory Deli will be enlarged from 783 SF to 906SF; #00619268-SBP
Permit-34	Edwards Life Sciences	2	1411	McGaw	1	Existing	Paid	12/19/2014					97,664		15,688	Office and Warehouse			0	Per 00593571-CNEW, E2 Building, 1411 McGaw (attached to 1441 McGaw) is comprised of 97,664 SF office and 15,688 SF warehouse; #00593571-CNEW
Permit-35	Irvine Concourse	413	1970	Main	1	Existing	Paid	2/26/2015							200	Warehouse			0	Generator Enclosure in Parking Garage 200 SF; #00628249-SBP
Permit-36	Alton Self Storage	14	2215	Alton Pkwy	1	Existing	Paid	3/19/2015							215,651	Warehouse			0	This project consists of the build-out of a mini-warehouse from an existing shell industrial building. An existing SF Credit of $3,344.13 has been applied to reduce the Gross IBC Fee; #00630971-SBP
Permit-37	Pro Source	461	1672	McGaw	1	Existing	Paid	3/26/2015					179			Industrial to Office			0	Per #00625128-CTTI modify to 3,286 SF Office and 8,270 Warehouse; #00631016-SBPT
Permit-38	McKinlry	45	17611	Armstrong	1	Existing	Paid	4/13/2015					4,426			Industrial to Office			0	The building had 5,214 square feet of office and 16,098 square feet of manufacturing. The applicant submitted 00619379-CASF to provide 9,460 square feet of office and 13,418 square feet of warehouse. A total of $24,650.18 in IBC fees is due; #00632886-SBP
Permit-39	N/A	276	17752	Fitch	1	Existing	Paid	5/20/2015					1,390			Industrial to Office			0	Per #00631430-CTIS, convert portion of existing warehouse to office use and demolish 138 SF of warehouse. Office to be 5,471 SF with 15,854 SF Warehouse; #00637341-SBPT
							39	TOTAL	0	168	0	0	235,910	24,582	257,525		0	0	0	

Discretionary IBC Projects Approved between July 31, 2010 and July 31, 2015 (IBC Fee Estimates based on July 1, 2016 IBC Fee Amounts)

ID	Project Name	IBC Project #	Address	Street	Status Code	Development Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					

1. Demolition Credits are based on a specific fee rate assumed back in July, 2005. Actual credit based on future issuance date of demolition permit may be less.

ID	Project Name	IBC Project	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
Disc-1	Milani Apartments (formerly Martin St Apts.)	702	18831	Von Karman	6	Approved	Not Paid	N/A	287							Residential	229	58	287	Approval: November 2014
Disc-2a	Irvine Gateway (formerly Irvine Lofts/Kilroy)	671	17150	Von Karman	3	Approved	Paid	12/14/2015	363							Residential	276	87	363	Approval: December 2011
Disc-2b	Irvine Gateway (formerly Irvine Lofts/Kilroy)	671	17150	Von Karman	6	Approved	Not Paid	N/A	71							Residential	71		71	Approval: December 2011
Disc-3	Elements (formerly ITC/Greenlaw/Campus Verde)	56 & 97	2601	Campus	6	Approved	Not Paid	12/12/2014	900							Residential	720	180	900	Approval: December 2014; Demo SF Credits from IBC Projects #98 and #658 Remaining 700 units are Paid for and are shown as ID - Pre-8
Disc-4	16103 Derian (formerly 17275 Derian)	235	16103	Derian	5	Approved	Paid	3/17/2016	80							Residential	66	14	80	Approval: February 2015 LU will be included for fee calc, but the dev will not be subject to new fees
Disc-5	360 Fusion (formerly Murphy Apts)	582	2852	McGaw	5	Approved	Paid	2/22/2016	280							Residential	224	56	280	Approval: October 2014 LU will be included for fee calc, but the dev will not be subject to new fees
Disc-6	Main and Jamboree Apartments	431	2700	Main	5	Approved	Paid	11/3/2016	388							Residential	310	78	388	Approval: December 2014 LU will be included for fee calc, but the dev will not be subject to new fees
Disc-7	Pistoia Apartments	238	17422	Derian	6	Approved	Not Paid	N/A	371							Residential	297	74	371	Approval: July 2015
Disc-8	2152-2182 Alton	1	2152-2182	Alton	4	In Process / Pending	Not Paid	N/A	357							Residential	286	71	357	Approval: May 2016
Disc-9	17822 Gillette	307	17822	Gillette	4	In Process / Pending	Not Paid	N/A	137							Residential	137	0	137	Approval: Feb 2016
								TOTAL	3,234	0	0	0	0	0	0		2,616	618	3,234	

Pending Project - Fees Unpaid

ID	Project Name	IBC Project #	Address	Street	Status Code	Development Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
Pend-1	Campus and Von Karman Apartments	N/A	2171-2361 Campus and 2192, 2222, 2302 Martin		4	In Process / Pending	Not Paid	N/A	876							Residential	701	175	876	
Pend-2	2055 Main		2055	Main	4	In Process / Pending	Not Paid	N/A	179							Residential	143	36	179	
Pend-3	2525 Main		2525	Main	4	In Process / Pending	Not Paid	N/A	272							Residential	217	55	272	
Pend-4	2660 Barranca/16542 Millikan		2660 Barranca/16542 Millikan		4	In Process / Pending	Not Paid	N/A	180							Residential	180		180	
Pend-5	17811 Gillette		17811	Gillette	4	In Process / Pending	Not Paid	N/A	75							Residential	75		75	
Pend-6	17861 Cartwright		17861	Cartwright	4	In Process / Pending	Not Paid	N/A	54							Residential	54		54	
								TOTAL	1,636	0	0	0	0	0	0		1,370	266	1,636	

Pre Application - Fees Unpaid

ID	Project Name	IBC Project #	Address	Street	Status Code	Development Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
Pre-ap1	2602 McGaw		2602	McGaw	4	In Process / Pending	Not Paid	N/A	120							Residential	120		120	

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ID	Project Name	IBC Project	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
								TOTAL	120	0	0	0	0	0	0		120	0	120	
Development Agreements for IBC Developments (Central Park West and Park Place are not included in the fee calculation and are not subject to 2015 Fees)																				
ID	Project Name	IBC Project #	Address	Street	Status Code	Development Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
									DU	Ext-Stay (Rms)	Hotel (Rms)	Retail (SF)	Office (SF)	Ind-Mix (SF)	M.Ware (SF)					
DA-1-1	Central Park West (CPW) - Existing	338	401	Rockefeller	1	Built/Existing	Paid		646							Residential	646		646	
DA-1-2	Central Park West (CPW) - Permits Issued	338	401	Rockefeller	2	Under Const.	Paid		16							Residential	16		16	
DA-1-3	Central Park West (CPW) - Approved Res. Units	338			6	Approved	Unpaid - Demo Credit Remaining		613							Residential	613		613	
DA-1-4	Central Park West (CPW) - Retail	338			6	Approved	Unpaid - Demo Credit Remaining		0			26,688				Residential / Retail			0	
								TOTAL	1,275	0	0	26,688	0	0	0		1,275	0	1,275	
DA-2-1	18582 Teller (HCG)	501	2722	Michelson	7	Demolished	Unpaid - Demo Credit Remaining		0				15,781			Office			0	
DA-2-2	18582 Teller (HCG)	501			7	Demolished	Unpaid - Demo Credit Remaining		0					104,519		Industrial			0	
DA-2-3	2722 Michelson (HCG)	501			7	Pending Demo	Unpaid - Demo Credit Remaining		0				25,828			Office			0	
DA-2-4	2722 Michelson (HCG)	501			7	Pending Demo	Unpaid - Demo Credit Remaining		0					143,727		Industrial			0	
DA-2-5	Hines CA Green (HCG)	501			6	Approved	Not Paid		0				785,000			Office			0	Option to pay lower prevailing fee, based on DA
DA-2-6	Hines CA Green (HCG)	501			6	Approved	Not Paid		0			15,500				Retail			0	Option to pay lower prevailing fee, based on DA
								TOTAL	0	0	0	15,500	826,609	248,246	0				0	
DA-3-1	Park Place (Res. Site 1 - Future)	503	3333	Michelson	6	Approved	Not Paid		267							Residential	267		267	Only 267 residential units to be paid. 360 Affordable units at Villa
DA-3-2	Park Place (Res. Site 1 - Vireo Apts.)	503			6	Approved	Not Paid		520							Residential	520		520	
DA-3-3	Park Place (Res. Site 1 (TIC Apts.)	503			2	Under Const.	Paid		989							Residential	861	128	989	Per Bill Jacobs: Remainder of 360 DB units approved for Park Place is 128 units within 989 Unit TIC project
DA-3-4	Park Place (BOSA) Res. Site 1 (Density Bonus)	503			1	Existing	Paid		232							Residential		232	232	Per Bill Jacobs: Corrected Park Place Project names- Site 1 is Bosa- 232 DB Units
DA-3-5	Park Place (Villa Sienna)	503	20	Palatine	1	Existing	Paid		1226							Residential	1226		1,226	
DA-3-6	Park Place (Villa Sienna Affordable)	503	20	Palatine	1	Existing	Paid		216							Residential	216		216	
DA-3-7	Park Place (Hotel)	503			1	Existing	Paid				190					Hotel			0	
DA-3-8	Park Place (Office)	503			6	Approved	Not Paid						2,629,820			Office			0	
DA-3-9	Park Place (Retail)	503			6	Approved	Not Paid					122,562				Retail			0	
DA-3-10	Park Place (Health Club)	503			6	Approved	Not Paid						45,000			Office			0	
								TOTAL	3,450	0	190	122,562	2,674,820	0	0		3,090	360	3,450	
DA-4-1	Avalon Apartments I	18	2777	Alton	1	Existing	Paid		279							Residential	224	55	279	
DA-4-2	Avalon Apartments I	18	2777	Alton	3	Approved	Paid		1							Residential		1	1	

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ID	Project Name	IBC Project	Address	Street	Status Code	Dev Status	IBC Fee Status	IBC Fee Status Date	Quantities							Land Use	Residential Base Units	Density Bonus DU	Total Project DU	Notes
DA-4-3	Avalon Apartments II	334	16901	Jamboree	1	Existing	Paid		179							Residential	143	36	179	
DA-4-4	Avalon Apartments III	530	16952	Millikan	2	Under Const.	Paid		156							Residential	126	30	156	
								TOTAL	615	0	0	0	0	0	0		493	122	615	
DA-5	2851 Alton Condos	19	2851	Alton	6	Approved	Not Paid		170			0				Residential	170		170	
		Status Codes																		
		1	Existing by July 31, 2015 (Fees Paid)																	
		2	Under Construction (Fees Paid)																	
		3	Approved (Fees Paid)																	
		4	In Process (Fees not paid)																	
		5	Approved (Fees Paid after 07/31/15 deadline)																	
		6	Approved (Fees not Paid)																	
		7	Demolished / Pending Demolition (Fees not paid, pending demolition credit)																	

1. Demolition Credits are based on a specific fee rate assumed back in July, 2005. Actual credit based on future issuance date of demolition permit may be less.

Public Works Administered Grants

Transportation - All Programs (Excluding Measure M / M2)

	Awarded Applications			
Grant Program Name	**Grants Awarded**	**Amount Awarded**	**Total Project Costs Identified**	**Percentage Funded by Grant**
Active Transportation Program	1	$ 500,000	$ 500,000	100%
Bicycle Corridor Improvement Program	3	$ 1,980,920	$ 2,916,000	68%
Bicycle Transportation Account	4	$ 479,769	$ 533,077	90%
Bridge Preventive Maintenance Program	1	$ 817,132	$ 923,000	89%
Federal Safe Routes to School	1	$ 500,000	$ 500,000	100%
Highway Safety Improvement Program	4	$ 2,702,400	$ 3,665,937	74%
Local Government Match Program	2	$ 135,500	$ 226,000	60%
State-Legislated Safe Routes to School	1	$ 118,800	$ 132,000	90%
State-Local Partnership Program	2	$ 1,575,756	$ 3,148,512	50%
Transportation Enhancement Activities Program	1	$ 354,719	$ 479,350	74%
	20	**$ 9,164,996**	**$ 13,023,876**	**70%**

	Awarded Applications			
Project Category	**Grants Awarded**	**Amount Awarded**	**Total Project Costs Identified**	**Percentage Funded by Grant**
Mobility Improvements	14	$ 4,969,708	$ 6,287,427	79%
Street Improvements	6	$ 4,195,288	$ 6,736,449	62%
	20	**$ 9,164,996**	**$ 13,023,876**	**70%**

Mobility Improvements: Focuses on improvements for active transportation (e.g. sidewalks, trails, lighting, bicycle amenities).
Street Improvements: Includes street widening, intersection improvements, traffic signal management.
Data from Transportation Planning & Project Development division beginning FY 2008-2009 to Present

Public Works Administered Grants
Transportation - Measure M / M2

		Total		IBC Specific	
Combined Transportation Funding Program Name		**Grants Awarded**	**Amount Awarded[1]**	**Grants Awarded**	**Amount Awarded[1]**
Measure M (1991 - 2011)	Arterial Highway Financing Program	2	$ 654,295	1	$ 478,500
	Arterial Highway Rehabilitation Program	35	$ 12,991,123	7	$ 2,041,271
	Bicycle and Pedestrian Facilities Program	4	$ 425,000	0	$ -
	Commuter Rail Fund	1	$ 150,000	0	$ -
	Growth Management Area Program	45	$ 6,621,152	15	$ 2,344,428
	Intersection Improvement Program	7	$ 6,684,765	4	$ 4,365,991
	Local / State Transportation Partnership	5	$ 5,663,066	2	$ 2,603,000
	Master Plan of Arterial Highway Program	8	$ 16,052,076	8	$ 16,052,076
	Regional Interchange Program	4	$ 14,197,975	0	$ -
	Regional Surface Transportation Program	3	$ 16,841,168	2	$ 10,524,133
	Regional Surface Transportation Program / STP	2	$ 18,360,248	0	$ -
	Signal Improvement Project	43	$ 6,696,314	15	$ 2,075,921
	Smart Street Program	1	$ 119,903	0	$ -
	Transportation Demand Management	15	$ 1,832,743	8	$ 859,122
	Measure M Subtotal	**175**	**$107,289,828**	**62**	**$ 41,344,442**

Comprehensive Transportation Funding Program Name		**Grants Awarded**	**Amount Awarded[1]**	**Grants Awarded**	**Amount Awarded[1]**
Measure M2 (2011 - 2041)	Arterial Capacity Enhancements (ACE)	5	$ 9,016,356	1	$ 801,000
	Community Based Transit / Circulators (CBTC)	2	$ 5,418,242	1	$ 2,712,258
	Freeway Arterial / Streets Transitions (FAST)	1	$ 105,000	1	$ 105,000
	Intersection Capacity Enhancements (ICE)	6	$ 3,516,310	3	$ 636,881
	Safe Transit Stops (STS)	1	$ 30,000	0	$ -
	Traffic Signal Synchronization Program (TSSP)	8	$ 8,459,461	4	$ 5,007,807
	Measure M2 Subtotal	**23**	**$ 26,545,369**	**10**	**$ 9,262,946**

Measure M + M2 Total	**198**	**$133,835,197**	**72**	**$ 50,607,388**

Measure M2 IBC Capacity Enhancement Projects	**Grants Awarded**	**Amount Awarded[1]**	**Project Cost Estimate[2]**	**Grant Funded Estimate**
Jamboree Rd / Barranca Pkwy Intersection Improvement	2 (ICE)	$ 501,993	$ 6,569,566	8%
Jamboree Rd / Main St Intersection Improvement	1 (ICE)	$ 136,411	$ 10,684,110	1%
Jamboree Rd Widening[3]	1 (ACE)	$ 801,000	$ 20,481,030	4%
IBC Capacity Enhancement Projects	**4**	**$ 1,439,404**	**$ 37,734,706**	**4%**

[1] *Amount Awarded per OCFundtracker database (payments received and/or programmed allocations).*
[2] *Project Cost Estimate reflected as total budget in ONESolution.*
[3] *Not an IBC Vision Plan Improvement project.*

ATTACHMENT 4

Rev. 2017.08.22 DC

Completed IBC Roadway Improvements

1992 IBC Nexus Fee Program Improvement Location	
Arterials	Jamboree Road - Barranca Parkway to Michelson Drive
	MacArthur Boulevard - Main Street to Douglas
	Main Street - Sunflower Avenue to San Diego Creek Bridge
	Michelson Drive & San Diego Creek Bridge
Intersections	Culver Drive & Michelson Drive
	Harvard Avenue & Michelson Drive*
	Jamboree Road & Alton Parkway
	Jamboree Road & I-405 Northbound Ramp
	Jamboree Road & I-405 Southbound Ramp
	Jamboree Road & Main Street*
	Jamboree Road & Michelson Drive*
	Jamboree Road & Irvine Center Drive / Edinger Avenue
	MacArthur Boulevard & Campus Drive
	MacArthur Boulevard & I-405 Northbound Ramp
	MacArthur Boulevard & I-405 Southbound Ramp
	MacArthur Boulevard & Jamboree Road
	MacArthur Boulevard & Main Street
	MacArthur Boulevard & Michelson Drive
	Redhill Avenue & Dyer Road / Barranca Parkway
	Redhill Avenue & MacArthur Boulevard
	Redhill Avenue & Main Street

* 2010 and 2015 IBC Vision Plan Traffic Studies identify additional improvements at these locations.

SUMMARY EXHIBIT

Table 2: 2010 IBC Vision Plan Improvement List (Irvine Projects)

Intersection / Arterial Location	Status	Est. Project Completion Date[1]	Project Cost Estimate[2]	IBC Fee Program Match (90%)	City Match (10%)	Outside Funding Sources[3]
Jamboree Road at Barranca Parkway	Design	2020	$ 6,569,566	$ 5,912,609	$ 656,957	$ 501,993
Jamboree Road at Main Sreet	Design	2019	$ 10,684,110	$ 9,615,699	$ 1,068,411	$ 136,411
Jamboree Road at Michelson Drive (Pedestrian Bridge)	Prelim Design	2019	$ 20,000,000	$ 18,000,000	$ 2,000,000	$ 4,248,766
Harvard Avenue at Michelson Drive	Buildout					
Culver Drive at I-405 NB Ramps[4]	Project Removed					

[1] *Completion dates are subject to right-of-way acquisition timing, as applicable.*
[2] *Project Cost Estimate reflected as total budget in ONESolution.*
[3] *Funding sources include: Community Facilities District 2004-1 Improvements - Central Park and grants.*
[4] *No longer needed based on findings in the 2015 Update to: IBC Vision Plan Traffic Fee Nexus Study.*

Table 3.2: 2015 Updated IBC Vision Plan Traffic Mitigation Improvements

Agency	Fair Share	New Project	Intersection / Arterial Location	Cost	Cost included for Fee Calculation
Irvine	90%	Yes	Culver Drive at Alton Parkway	$ 1,204,030	$ 1,083,627
			Gillette Avenue at Alton Parkway	$ 487,500	$ 438,750
			Jamboree Road NB Ramps / Warner Avenue	$ 2,592,998	$ 2,333,698
			Loop Road / Park Avenue at Warner Avenue	$ 5,411,023	$ 4,869,921
			Von Karman Avenue / Tustin Ranch Road at Barranca Parkway	$ 7,558,713	$ 6,802,842
			Von Karman Avenue at Alton Parkway		
		No	Harvard Avenue at Michelson Drive	$ 2,752,766	$ 2,477,489
			Red Hill Avenue between Main Street and MacArthur Boulevard	$ 18,419,390	$ 16,577,451
Santa Ana	50%	No	Alton Parkway Overcrossing at SR-55*	$ 60,184,755	$ 30,092,378
	90%		Dyer Road widening between SR-55 NB On-Ramp and Red Hill Avenue	$ 25,011,301	$ 22,510,171
	9.6%		Flower Street and Segerstrom Avenue	$ 712,124	$ 68,364
Costa Mesa	2.4%	No	SR-55 Frontage Road SB Ramps at Paularino Avenue	$ 1,207,101	$ 28,970
			Cost of Improvements (total for fee calculation)		*$ 87,283,661*
			Caltrans Agreement Roll Over		$ 6,585,299
			2015 Update IBC Vision Plan Improvement Cost		**$ 93,868,960**

** Based on 2014 final design cost.*

ATTACHMENT 6

Building Industry Association of Southern California, Inc.
ORANGE COUNTY CHAPTER

PRESIDENT
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KB HOME

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May 31, 2017

The Honorable Don Wagner
Mayor, City of Irvine
One Civic Center Plaza
Irvine, CA 92606

Re: Irvine Business Complex Traffic Nexus Fee Study Update

Dear Mayor Wagner and City Council Members:

On behalf of our membership, **I would like to state our concerns with the proposed Traffic Nexus Fee Study Update.**

The Building Industry Association of Southern California, Orange County Chapter (BIA/OC) is a non-profit trade association of over 1,100 member companies employing over 100,000 people affiliated with the home building industry. Our mission is to champion housing as the foundation of vibrant and sustainable communities.

Orange County is ranked 2nd only to the bay area for the highest housing prices. This is largely due to 1) lack of adequate housing stock, 2) a jobs to housing imbalance, and 3) lack of available land coupled with excessive regulation on the housing industry.

As the City considers the proposed Traffic Fee Update for the remaining development in the Irvine Business Complex (IBC), we ask the Council to consider the thousands of dollars in fees currently associated with each dwelling unit. At a time when the region is faced with rising home prices, every effort to reduce the ultimate cost to build in Orange County should be considered.

With this in mind, the BIA/OC is concerned by the proposed 108% increase to the traffic impact fee, and ask that options such as gradually implementing the fee update be proposed.

While we understand that traffic is an important issue the City must

ATTACHMENT 7

evaluate as the IBC implementation moves forward, increasing the cost on those doing business in the IBC by such a large percentage at one time may affect the affordability of new development projects.

Thank you for your thoughtful consideration.

Respectfully,



Steven C. LaMotte
Chapter Executive Officer

ADDENDUM TO THE IRVINE BUSINESS COMPLEX RESIDENTIAL AND MIXED-USE VISION PLAN DRAFT ENVIRONMENTAL IMPACT REPORT (SCH NO. 2007011024)

FOR THE 2015-17 IBC TRAFFIC IMPROVEMENT FEE PROGRAM UPDATE IRVINE, CA

September 12, 2017

City of Irvine Community Development Department
One Civic Center Plaza
Irvine, CA 92623
Contact: Bill Jacobs, Principal Planner
(949) 724-6521

ATTACHMENT 8

Addendum to the IBC Vision Plan and Mixed Use Overlay Zoning Ordinance Final Environmental Impact Report (SCH No. 2007011024) Planning Area 36

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A. Irvine Business Complex Vision Plan 2015 Traffic Study Update (Executive Summary), prepared by Iteris and HDR, January 13, 2016

B. 2015 Traffic Study Update to Irvine Business Complex Vision Plan Traffic Fee Nexus Study, prepared by HDR and Iteris, June 7, 2017

C. Mitigation Monitoring and Reporting Plan from 2010 IBC Vision Plan EIR

CITY OF IRVINE
ADDENDUM TO THE IBC EIR VISION PLAN

1.0 INTRODUCTION

1.1 Purpose and Relevant Background for This Addendum

This Addendum serves as the environmental document enabling the City of Irvine to approve the proposed 2015-17 Irvine Business Complex (IBC) Traffic Improvement Fee Program Update and make minor changes to Mitigation Measure 13-1 to allow the City to update its traffic study in accordance with the procedures and standards set forth in Section 9-36-14(K) of the Irvine Zoning Ordinance (the "Project"). As discussed more fully below, the City has determined, via a 2015 Traffic Study Update, that the Project does not present either new significant impacts or substantial increases in the severity of previously identified environmental impacts than previously studied under the IBC's Program EIR completed in 2010. Accordingly, this Addendum satisfies the City's environmental review obligations under the California Environmental Quality Act (CEQA). (*See* CEQA Guidelines, § 15164.)

By way of background, the City previously approved a Program EIR for the IBC in 2010 ("IBC EIR"). That document, including the "IBC Vision Plan and Mixed Use Zoning Ordinance" ("IBC Vision Plan"), evaluated the environmental impacts of (1) increasing the total number of potential residential entitlement in the IBC (Planning Area 36) from 9,015 residential dwelling units to 15,000 units, representing an increase of 5,985 additional units, while (2) implementing corresponding decreases in potential non-residential entitlement. Notably, this reallocation did not result in an increase in the overall intensity limitations set forth in the Irvine Zoning Ordinance. In fact, at the time that the IBC EIR was certified in 2010, 2,035 of the 5,985 units identified as additional units were designated as pending units associated with development applications filed for seven pending projects, and the remaining 3,950 units were identified as potential units without any pending applications. In addition to residential entitlement, the IBC EIR evaluated the addition of up to 1,598 new density bonus units that are allowable in accordance with state law on top of the 440 existing and approved density bonus units in the IBC. If all density bonus units are used, the total residential intensity in the IBC could total 17,038 units upon buildout.

The certified IBC EIR also identified a series of transportation improvements and contemplated a corresponding fee program to mitigate the impacts of the IBC Vision Plan pursuant to the Mitigation Fee Act, named the IBC Traffic Improvement Fee Program. The City adopted the IBC Traffic Improvement Fee Program in 2011.

As required by the City's Zoning Ordinance, the City conducted an updated traffic study in 2015 (the "2015 Traffic Study Update") to ensure the implementation of the IBC Traffic Improvement Fee Program remained in accordance with the IBC Vision Plan. This 2015 Traffic Study Update identified changes in traffic conditions, and assumed a reduction in the theoretical number of potential density bonus units based on unallocated units because the number of unallocated units decreased from the original 2010 land use assumptions.

The 2015 Traffic Study Update concluded that the changes in traffic conditions would not cause new or more severe adverse environmental impacts or require major revisions to the project studied in the IBC EIR. The 2015 Traffic Study Update reached this conclusion by

considering new information, in the form of a "snapshot" of the current development activity in the IBC, as well as ambient regional growth to compare with the 2010 assumptions. While traffic conditions, including the number and location of impacts, have changed since 2010, none of these changes are significant. Accordingly, an addendum is the appropriate level of environmental review to update the IBC Traffic Improvement Fee Program.

For example, the 2015 Traffic Study Update noted that the residential unit intensity cap had not increased since the 2010 study, and while some intersections were identified as deficient, an updated fee program would mitigate those deficiencies. Notably, though, the 2015 Traffic Study Update concluded that there is actually a net overall ***decrease*** in traffic impacts compared to the 2010 study.

As discussed below, there are no new significant impacts resulting from the implementation of the Project, nor are there any substantial increases in the severity of any previously identified environmental impacts. Any Project impacts would be either the same or lessened from the anticipated levels associated with the 2010 IBC Vision Plan, which were evaluated in the IBC EIR. Except where indicated otherwise in this Addendum, the Project impacts were evaluated in the IBC EIR and all feasible mitigation measures and alternatives identified in that EIR would be incorporated into the resolution approving the Project.

1.2 Legal Basis for Addendum

CEQA requires the City to "prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred." (CEQA Guidelines, § 15164.) Accordingly, the City must prepare an addendum unless it "determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:"

(1) Substantial changes are proposed in the project which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project would have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined would be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those evaluated in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(CEQA Guidelines, § 15162.) As discussed in this Addendum, none of the conditions requiring the preparation of a subsequent EIR are met. (*See ibid.*) Accordingly, an addendum is the legally appropriate level of environmental review for the approving the Project.

1.3 Previous Environmental Documentation

The IBC EIR consists of a Program EIR for the IBC Vision Plan General Plan Amendment and Mixed Use Overlay Zoning Ordinance, and a Project EIR for a number of residential development proposals in process at the time; thereby allowing for the eventual build out of the IBC. (CEQA Guidelines, §§ 15168, 15161.) That General Plan Amendment evaluated and approved the following:

- Adoption of the IBC Residential Mixed Use Vision Plan as a new element of the General Plan;
- Amendment of the Land Use Element to reference the new IBC Element;
- Amendment of Land Use Element Table A-1 to increase the residential unit cap to 15,000 units and reduce non-residential intensity accordingly;
- Amendment of Land Use Element Table A-1 to replace the previous 52 unit/acre density cap with a 30 unit/acre density minimum;
- Amendment of Circulation Element Figure B-1 to reflect the downgrade of Jamboree Road from a 10-lane facility to an eight-lane facility between Barranca Parkway and McGaw Avenue; downgrade Red Hill to six lanes between Barranca Parkway and Main Street; downgrade Barranca Parkway to seven lanes (four westbound, three eastbound) between Red Hill and Jamboree Road; downgrade Main Street to a six-lane divided arterial between Red Hill and Harvard Avenue; downgrade MacArthur Blvd. to a seven-lane divided highway between Red Hill and Main Street and to a six-lane divided highway between Fitch and Red Hill Avenue;
- Amendment of Circulation Element Figure B-4 to reference new IBC trails;
- Amendment of Parks and Recreation Element Table K-1 to add additional description of IBC neighborhood parks; and
- Amendments to Zoning Ordinance Chapter 9-36, *Irvine Business Complex*, and Chapter 5-8, *Irvine Business Complex Residential/Mixed Use Overlay Zone*, to update and clarify existing development standards related to monitoring of development intensity and land use compatibility.

Relevant to this Project, the IBC EIR also included the following improvements to mitigate the traffic impacts of implementing the IBC Vision Plan:

Costa Mesa

- Intersection #12: SR-55 Southbound Frontage Road at Baker Street: Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane. Restripe the eastbound approach to two through lanes and a shared through right turn lane.

- Intersection #13: SR-55 Northbound Frontage Road at Baker Street: Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound de facto right turn lane. Addition of second southbound left-turn lanes.

Irvine

- Intersection #141: Jamboree Road and Main Street: Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane.

- Intersection #188: Harvard Avenue and Michelson Drive: Add a second southbound left turn lane.

- Intersection #232: Culver Drive and I-405 Northbound Ramps: Restripe the westbound approach of this intersection to one left turn lane and two right-turn lanes.

- Intersection #136: Jamboree Road and Barranca Parkway: Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane.

Newport Beach

- Intersection #62: Campus Drive at Bristol Street NB: In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport.

- Intersection #85: MacArthur Boulevard and Birch Street: Improve the eastbound approach to two eastbound left-turn lanes and two eastbound through lanes.

Santa Ana

- Intersection #543 Bristol Street and Segerstrom Avenue: Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of Santa Ana to determine the most appropriate future improvement at this location.

    - Alternative 1: Add 3rd eastbound through and westbound through lanes on Segerstrom Avenue

    - Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street

- Intersection #723 Main Street and Dyer Road (Segerstrom): Add a third northbound through lane and a defacto northbound right-turn lane.

- Intersection #730 Grand Avenue and Warner Avenue: Add a third westbound through lane.

- Arterial #1884 MacArthur Blvd. from Main Street to SR-55: Widen from 6 to 8 Lanes

Tustin

- Intersection #24: Newport Avenue and Walnut Avenue: Add a defacto westbound right turn lane and defacto northbound right turn lane.

- Intersection #93: Tustin Ranch Road and El Camino Real: Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane.

- Intersection #134: Loop Road/Park Avenue at Warner Avenue: Add a third eastbound through lane.

- Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street: This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.

Most of the environmental impacts identified in the IBC EIR were determined to be less than significant or were reduced to a level considered less than significant through either the adoption of mitigation measures or the incorporation of project revisions that would avoid or substantially lessen impacts. However, impacts to Air Quality, Noise, Land Use, and Traffic were identified as significant and unavoidable in the IBC EIR. For those environmental topic areas, the City adopted a Statement of Overriding Considerations. This Addendum addresses the changed circumstances between then and now, concluding that these changed circumstances do not require a subsequent EIR. (*See* Section 5.0, *Environmental Assessment*, *infra*.)

This Addendum also makes minor changes to Mitigation Measure 13-1. As approved in 2010, Mitigation Measure 13-1 required an initial traffic study for the traffic improvements at

the fifteen intersections listed above. This Addendum updates Mitigation Measure 13-1 to allow for subsequent traffic studies in accordance with Section 9-36-14(K) of the Irvine Zoning Ordinance. The City has a legitimate reason to modify Mitigation Measure 13-1 — as drafted, the mitigation measure does not contemplate and potentially constrains the scope of updated traffic studies that are required by the Zoning Ordinance. While Mitigation Measure 13-1 was effective for the initial traffic study, it's lack of flexibility could render it less effective for subsequent traffic studies. The Addendum concludes that the changes to Mitigation Measure 13-1 do not require a subsequent EIR. (*See* Section 5.0, *Environmental Assessment*, *infra*.)

1.4 Evaluation of Environmental Impacts

The City concluded that a subsequent EIR was not required for this Project by analyzing the Environmental Checklist Form factors the CEQA Guidelines identify for determining when a subsequent EIR is required. (*See* CEQA Guidelines, § 15063(d)(3).) Since the delta between the original environmental review the City conducted in 2010 and the Updated Traffic Study in 2015 shows no new significant impacts posed by this Project, no subsequent EIR is required, and this Addendum is appropriate. The Environmental Checklist Form is used to review the potential environmental impacts of the Project for each of the following environment topic areas:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic

- Utilities and Service Systems

1.5 Summary of Findings

Based on the City's analysis of the factors identified in CEQA's Environmental Checklist Form and the following supporting environmental impact assessment, the City concludes that there is substantial evidence in the record to show that this Project (including the changes to Mitigation Measure 13-1), would not result in any new significant impacts that were not previously addressed in the IBC EIR. Accordingly, the changes posed by the Project are appropriately analyzed via this Addendum.

To reach this conclusion, the City reviewed the following technical reports specific to the Project:

- Irvine Business Complex Vision Plan 2015 Traffic Study Update, prepared by Iteris and HDR, January 13, 2016 (referred to herein as the "2015 Traffic Study Update")

- 2015 Update to Irvine Business Complex Vision Plan Traffic Fee Nexus Study, prepared by HDR and Iteris, June 7, 2017 (referred to herein as the "2015 IBC Traffic Fee Nexus Study Update")

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Irvine Business Complex (IBC), also referred to within the City of Irvine as "Planning Area 36," is an urbanized, developing mixed-use area encompassing approximately 2,600 acres located within the City of Irvine. The 2015 Traffic Study Update" study area is consistent with the study area analyzed in 2010, and consists of the current boundaries of the IBC and its surroundings in the City of Irvine, as well as the Cities of Newport Beach, Tustin, Santa Ana, Costa Mesa, and unincorporated Orange County. Additionally, the entirety of the "Airport area" of Newport Beach is incorporated into the study area. To determine appropriate study area limits, a peak hour difference plot was developed between the Baseline and With Update model runs and the extent to which plan update related trips were originating and terminating formed the study area boundaries. The study area boundaries extend south of Ford Road within the City of Newport Beach to encompass the intersections at Jamboree Road and San Joaquin Hills Road and MacArthur Boulevard and San Joaquin Hills Road. These intersections, along with those along Bryan Avenue between Newport Avenue in the City of Tustin and Culver Drive in the City of Irvine were added to the IBC study area at the request of the Cities adjacent to the IBC. Figure 1.1 displays the study area with studied intersections highlighted. The study area is served by five freeways, SR-73, SR-55, I-405, I-5, and SR-261.

2.2 Project Objectives

The following objectives have been established for the IBC Vision Plan and will aid decision makers in their review of the proposed Project and associated environmental impacts. Implementation of the updated Traffic Improvement Fee Program will ensure ongoing compliance with these objectives.

- Provide for the ongoing development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan goals, which are:
  - Protect the existing job base.
  - Develop mixed-use cores.
  - Provide transportation, pedestrian, and visual connectivity.
  - Create usable open space.
  - Develop safe, well-designed neighborhoods.

- Provide additional housing opportunities near existing employment centers, consistent with the City's General Plan Land Use and Housing Elements.

- Provide residential uses near existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.

- Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.

- Contribute to the development of mixed-use cores by incorporating residential, office, and commercial/retail uses into existing areas of nearby community facilities, retail goods and

services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles traveled in the South Coast Air Basin.

- Provide neighborhood-level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.

- Incorporate sustainable provisions into implementation of the IBC Vision Plan.

- Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.

- Contribute to the development of mixed-use cores by incorporating residential uses into an existing core of nearby community facilities, retail and services businesses, and restaurants to enhance the area's overall urban character pursuant to the goals of the City's IBC Vision Plan.

- Minimize the impact to the environment by promoting a sustainable infill development, consistent with the objectives of Senate Bill (SB) 375.

2.3 Project Background

The City of Irvine established an Irvine Business Complex (IBC) Nexus Fee Program in 1992 (henceforth to be referred to as the "1992 Fee Program") to support the City's adoption of the more traffic intensive 1990 IBC Rezone General Plan Amendment (GPA) and Zone Code. The intent of the 1992 Fee Program was to support the implementation of specific improvements identified in a subsequent Environmental Impact Report (henceforth to be referred to as the 1992 EIR) prepared in conjunction with the 1992 rezoning actions. This approach is consistent with the City's General Plan Roadway Development Objective B-1 to "[p]lan, provide and maintain an integrated vehicular circulation system to accommodate projected local and regional needs."

As discussed in Section 1 of this Addendum, the City adopted the IBC Vision Plan in 2010 to accommodate the ongoing shift in development patterns to improve the jobs-housing balance, and reduce vehicle miles travelled. In recent years, as development patterns within the IBC showed an increased demand for residential uses and a decreased demand for manufacturing and warehouse uses, The Vision Plan project, together with its accompanying EIR (i.e, the IBC EIR) were approved/certified by the Irvine City Council on July 13, 2010.

As part of the Vision Plan approval, the Zoning Ordinance was updated to require the City to re-evaluate traffic conditions (and traffic impact locations) and its impact on improvement needs, by way of a five-year traffic study update (amended to every two years, starting in October 2015). In 2015, a five-year traffic study update (the "2015 Traffic Study Update") was completed to fulfil the requirements of the Zoning Ordinance. Based on the findings of the 2015 Traffic Study Update, a new set of transportation improvements were identified. In this 2015 five-year fee/nexus update (henceforth to be referred to as the "2015 IBC Traffic Fee Nexus Study Update"), the fee structure and the nexus associated with the findings of the 2015 Traffic Study Update, is being revised to accommodate the identified set of transportation improvements.

Subsequent to the completion of the Vision Plan, the City of Irvine entered into contractual agreements with the potentially affected jurisdictions/agencies (Caltrans District 12 and cities of Newport Beach, Santa Ana, Costa Mesa, and Tustin). Thus for this 2015 IBC Traffic Fee Nexus Study Update, only the fee associated with the findings of the 2015 Traffic Study Update, were updated. The associated fair-shares and the nexus remained consistent with the 2010 Vision Plan Traffic Fee Nexus Study (henceforth to be referred as "Vision Plan Traffic Fee Nexus Study"). This 2015 five-year update takes a "snapshot" of the development activity from the inception of the Vision Plan in 2010 to July 31, 2015, to evaluate the changes in land uses and traffic patterns, and subsequent improvement needs, resulting in the development of a proposed fee to be imposed effective fiscal year (FY) 2017-2018.

In 2010, the Vision Plan established two overlay zoning districts:

- Urban Neighborhood, in which residential mixed use was encouraged; and
- Business Complex, in which the existing allowable mix of non-residential uses was maintained.

The Vision Plan allowed for the buildout of 15,000 residential base dwelling units (DU) within the Urban Neighborhood Overlay Zone District, with a potential maximum of 2,038 additional density bonus units, pursuant to state law. In order to achieve the maximum residential development intensity contemplated under the Vision Plan, the Plan adopted a "flexible zoning" mechanism under which non-residential development intensity could be exchanged for residential development intensity, thus achieving the maximum 15,000 DU (plus 2,038 DU pursuant to state law), by "offsetting" reduction of nonresidential development intensity. Based on approvals since 2010, the total number of density bonus units pursuant to state law assumed for this five-year update is reduced to 1,794 DU, down from the theoretical assumption of 2,038 DU in 2010. The accompanying 2015 Traffic Study Update provided an assessment of existing, interim-year 2020 and buildout yearPost-2035 with and without the updated land use conditions.

2.4 Project Description and Purpose

Pursuant to requirements of the California Environmental Quality Act (CEQA), the City Council, as part of their approval of the Vision Plan in 2010, determined to make the City responsible to mitigate, where feasible, the impacts to the transportation system attributable to buildout of the Vision Plan. This 2015 IBC Traffic Fee Nexus Study Update is consistent with the principles of the Vision Plan Traffic Fee Nexus Study and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to support that development. Through equitable developer fees, the objective of this update is to financially support the implementation of identified improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the Vision Plan.

California's Mitigation Fee Act (AB 1600, Cal. Gov. Code §§ 66000-66009) creates the legal framework for local governments to assess new fees toward future development. Such fees require new development to pay its fair-share of the infrastructure cost necessary to serve new residents and businesses. AB 1600 stipulates that a local government must take the following steps to establish a nexus between a proposed fee and project impacts:

- Identify the purpose of the fee;
- Identify the use to be funded by the fee;
- Determine the reasonable relationship between:
  - The use of the fee and the type of development paying the fee;
  - The need for the traffic improvements and the types of development on which the fee is imposed; and
  - The amount of the fee and the cost of the public facilities or portion of the public facilities (in this case, traffic improvements) attributable to the development.

These principles closely emulate two landmark US Supreme Court rulings that provide guidance on the application of impact fees. The first case, Nollan v. California Coastal Commission (1987) 107 S.Ct. 3141, established that local governments are not prohibited from imposing impact fees or dedications as conditions of project approval provided the local government establishes the existence of a "nexus" or link between the exaction and the interest being advanced by that exaction. The Nollan ruling clarifies that once the adverse impacts of development have been quantified, the local government must then document the relationship between the project and the need for the conditions that mitigate those impacts. The ruling further clarifies that an exaction may be imposed on a development even if the development project itself will not benefit provided the exaction is necessitated by the project's impacts on identifiable public resources. The second case, Dolan v. City of Tigard (1994) 114 S.Ct. 2309, held that in addition to the Nollan standard of an essential nexus, there must be a "rough proportionality" between proposed exactions and the project impacts that the exactions are intended to provide benefit. As part of the Dolan ruling, the US Supreme Court advised that “a term such as “rough proportionality” best encapsulates what we hold to be the requirements of the Fifth Amendment. No precise mathematical calculation is required, but the city (or other local government) must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development."

The combined effect of both rulings resulted in the requirement that public exactions must be carefully documented and supported. This requirement was reiterated by the provisions of the State of California Mitigation Fee Act and subsequent rulings in the California Supreme Court (Ehrlich v. City of Culver City (1996) 12 C4th 854) and the California Court of Appeal (Loyola Marymount University v. Los Angeles Unified School District (1996) 45 Cal.App.4th 1256). The Vision Plan Traffic Fee Nexus Study satisfied the requirements of the State of California Mitigation Fee Act. Thus this update is not intended to re-analyze the nexus or the purpose, but is to review and revise the fee program based on the needs determined by the 2015 Traffic Study Update.

The 2015 Traffic Study Update analyzed the project study area presented in Figure 2. All improvements identified under the interim year 2020 and buildout Post-2035 conditions are located within this defined project study area. Consistent with the methodology used in the 2010 IBC Vision Plan Traffic Study (henceforth referred to as 2010 IBC EIR Traffic Study), the 2015 Traffic Study Update identified specific mitigation measure improvements that mitigate unacceptable level of service (LOS) E and F to acceptable LOS of A-D, per the City’s Traffic Impact Analysis (TIA) Guidelines (adopted August 2004) and per the performance criteria for each affected agency (Caltrans District 12 and cities of Newport Beach, Costa Mesa, Santa Ana, and Tustin). For locations within the City of Irvine, 90% of the improvement costs are included in the fee program. For locations not under the City of

Irvine's jurisdiction, a fair-share methodology is applied that considers fair-shares of improvement costs. The proportionate fair-shares of improvement costs in the City of Costa Mesa and Santa Ana, associated with remaining improvements from the City of Irvine's Genera Plan, are included in the Fee Program. A 2011 amended agreement with the City of Santa Ana, replacing the 1992 agreement between the two cities, identified specific improvements for which the City of Irvine is either partially or fully responsible for certain improvement and those associated improvement costs were included in this update. In 2009 and 2010, respectively, the City of Newport Beach and the City of Tustin entered into settlement agreements with the City of Irvine, where City of Irvine made a one-time lump-sum payment to each of the cities, as its fair-share contribution towards transportation improvements and absolved itself from any future financial or implementation obligation related to the Vision Plan buildout.

Exhibit 1: IBC Location Map

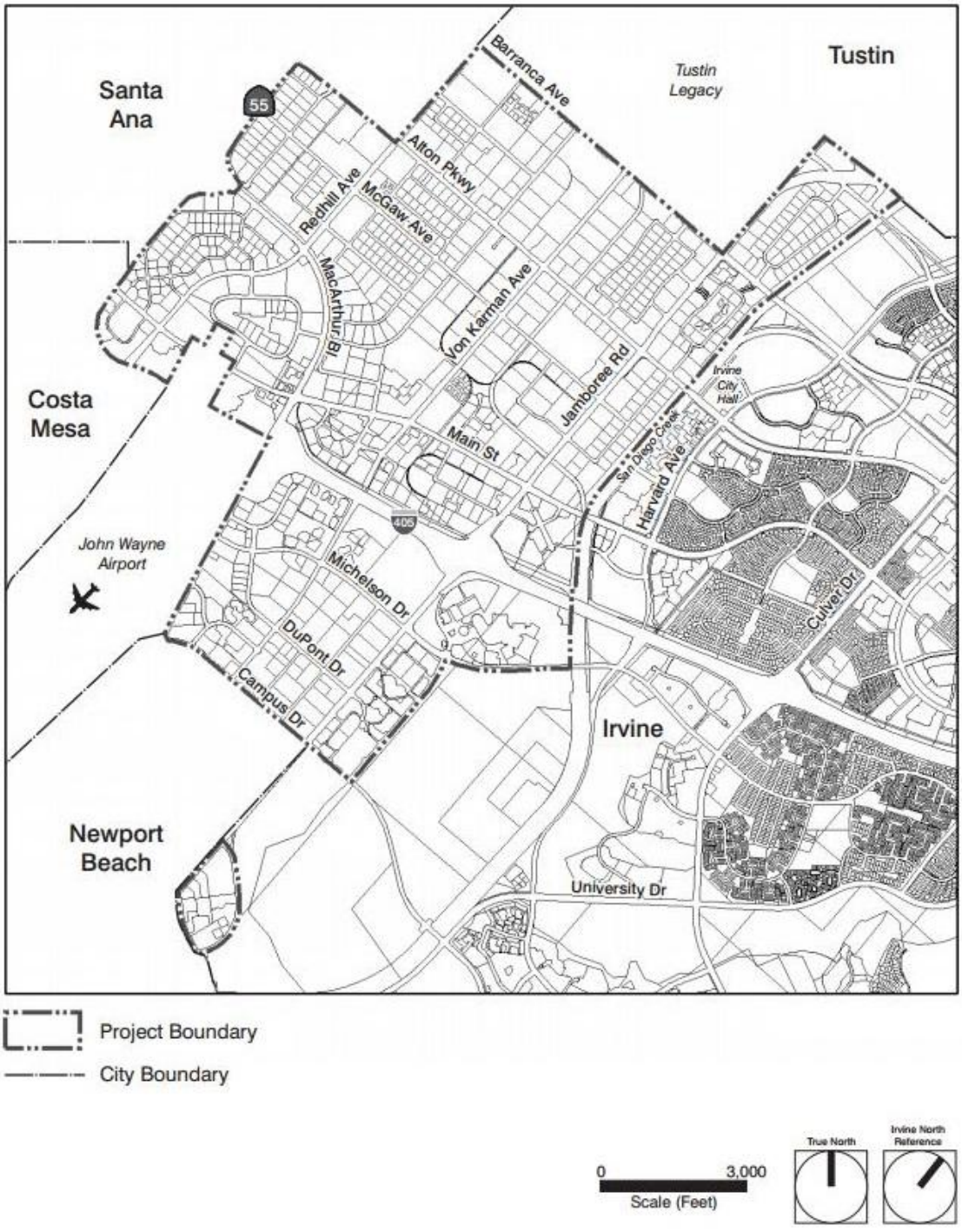
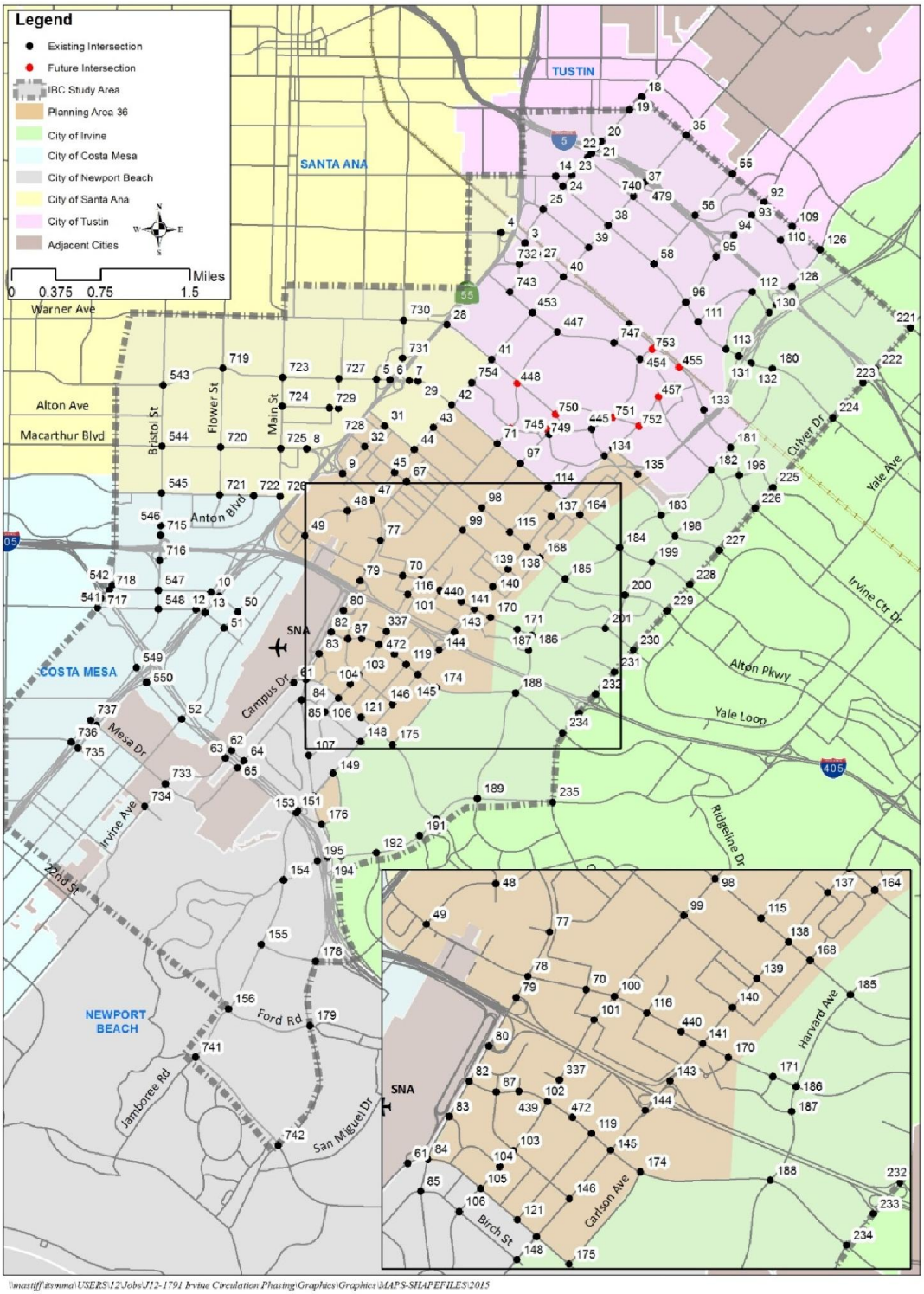


Exhibit 2: IBC Traffic Study Boundary



3.0 ENVIRONMENTAL SETTING

The following sections describe the setting for the Irvine Business Complex (IBC).

3.1 Aesthetics

The majority of the IBC is located in the Central Flatlands landform zone of the City of Irvine, while a portion of the IBC extends south of I-405 within the San Joaquin Hills landform zone. San Diego Creek, Peters Canyon Wash, and the Barranca Channel traverse the IBC. There are no significant landforms within the IBC or the surrounding area. Nighttime lighting in the IBC comes from various sources, such as streetlights, security lighting in parking lots and along walkways, electronic signs, vehicle headlights, and light emitted from the exteriors and interiors of buildings. Nighttime glare is generally limited to headlights reflecting off glass surfaces. During the day, sunlight reflects off glass surfaces associated with buildings and vehicles, creating glare.

The IBC is largely urbanized and does not contain any large areas of open space or significant visual resources. However, the San Joaquin Freshwater Marsh, which is located just southeast of the IBC, is considered a significant visual resource. Vegetation throughout the IBC consists of landscaped areas and mature ornamental trees. The City's General Plan does not identify any significant visual resources, preservation areas, or scenic vistas in the IBC. According to the California Department of Transportation's (Caltrans) California Scenic Highway Mapping System, the IBC is not located near an Officially Designated State Scenic Highway.

3.2 Agriculture and Forest Resources

The IBC is largely urbanized and does not contain any agricultural zoned land uses or operations. A mix of residential, industrial, and mixed-use development comprises the majority of the IBC. As a result, the IBC does not include any Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest land, timberland, or parcels under a Williamson Act contract.

3.3 Air Quality

South Coast Air Basin

The IBC is located in the South Coast Air Basin (Air Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Air Basin is located in a coastal plain, with connecting broad valleys and low hills. The Air Basin is bound by the Pacific Ocean to the southwest, with high mountains forming the remainder of its perimeter. The broader Air Basin region occurs in the semi-permanent high-pressure zone of the eastern Pacific, which results in a mild climate tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.

Criteria Air Pollutants

Air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable

particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, SO_2, NO_x, PM_{10}, $PM_{2.5}$, and lead are criteria pollutants. VOC and NO_x are criteria pollutant precursors and proceed to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are principal secondary pollutants.

Air Quality Management Plan

The South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (ARB), SCAG, and the U.S. Environmental Protection Agency (EPA) are responsible for preparing the Air Quality Management Plan (AQMP) for the Air Basin. The current 2012 AQMP was adopted December 7, 2012. The purpose of the 2012 AQMP is to establish a comprehensive and integrated program that will lead the Air Basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update of the Air Basin's projections in meeting the federal 8-hour O_3 standards. The AQMP is submitted to the EPA as the State Implementation Plan (SIP) once it is approved by the SCAQMD Governing Board and the ARB. Specifically, the AQMP serves as the official SIP submittal for the federal 2006 24-hour $PM_{2.5}$ standard, for which EPA established a due date of December 14, 2012. In addition, the AQMP updated specific elements of the previously approved 8-hour O_3 SIP: (1) an updated emissions inventory, and (2) new control measures and commitments for emissions reductions to help fulfill the Section 182(e)(5) portion of the 8-hour O_3 SIP.

The 2012 AQMP proposes $PM_{2.5}$ measures to be implemented by the 2014 attainment date, episodic control measures to achieve air quality improvements (would only apply during high $PM_{2.5}$ days), Section 182(e)(5) implementation measures (to maintain progress towards meeting the 2023 8-hour O_3 national standard), and transportation control measures. Most of the control measures focus on incentives, outreach, and education.

There are multiple VOC and NO_x reductions in the 2012 AQMP that attempt to reduce O_3 formation, including further VOC reductions from architectural coatings, miscellaneous coatings, adhesives, solvents, lubricants, mold release products, and consumer products. The 2012 AQMP also contains proposed mobile source implementation measures for the deployment of zero- and near-zero emission on-road heavy-duty vehicles, locomotives, and cargo handling equipment. There are measures for the deployment of cleaner commercial harbor craft, cleaner ocean-going marine vessels, cleaner off-road equipment, and cleaner aircraft engines. The 2012 AQMP also relies upon SCAG's Regional Transportation Strategy, which is included in its adopted 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2011 Federal Transportation Improvement Program.

Existing Ambient Air Quality

Existing ambient air quality levels and historical trends and projections in the vicinity of the IBC and the City of Irvine have been documented by the SCAQMD. The IBC is located between Source Receptor Area (SRA) 17-Inland Orange County (Central Orange County) and SRA 18-Coastal (North Orange County Coastal). For the IBC EIR, both the Costa Mesa Monitoring Station and the Anaheim Monitoring Station were used for data collection. The collected data shows that the broader IBC area occasionally exceeded the state and federal one-hour and eight-hour O_3 standards. The data also indicates that the area regularly exceeded the state PM_{10} and federal $PM_{2.5}$ standards. At these particular monitoring stations, the federal PM_{10} standard was only exceeded once during the five years between

2004 and 2008. The CO, SO_2, or NO_2 standards were not exceeded at any point during the same five-year period.

3.4 Biological Resources

The IBC is largely urbanized and does not contain any large areas of open space. The IBC contains several small, concrete-lined flood control channels that lack vegetative cover. A dominant feature of the area is San Diego Creek, which runs along the eastern edge of the IBC.

Plant Communities

Because of previous development, the IBC contains little remaining native vegetation. Existing vegetation primarily consists of non-native, ornamental landscaped areas with mature ornamental trees. Most of the remaining undeveloped parcels in the IBC contain little or no vegetation, due to recent grading, site preparation, or weed abatement activities. While some undeveloped and undisturbed parcels contain vegetation, these communities are generally characterized as ruderal, with only a small portion of undeveloped parcels fostering annual grassland.

In total, eight vegetation communities were mapped in the IBC: urban, ornamental plantings/parks, ornamental landscaping/annual grassland, ruderal, annual grassland, graded, concrete flood control channels, and earthen flood control channels. Despite the eight mapped vegetation communities, ornamental landscaping is the dominant plant community found within the IBC. These ornamental landscaped areas generally consist of a combination of turf, shrubbery, lawn, perennials, and narrow bands of urban forest.

Wildlife Communities

Wildlife found in the IBC is typical of developed urbanized areas containing predominantly ornamental plant communities. Bird species observed in the developed portions of the IBC are those commonly found in urbanized areas, such as the black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and lesser goldfinch (*Carduelis psaltria*). Because of its urbanized setting, the IBC does not function as a wildlife movement corridor. The majority of the IBC does not contain wetlands or waters of the U.S. or state that would be under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Californian Department of Fish and Wildlife (CDFW), or Santa Ana Regional Water Quality Control Board (RWQCB). However, San Diego Creek and San Joaquin Marsh, which adjoin the IBC, contain jurisdictional waters and wetlands.

The IBC is located in the Orange County's Central and Coastal Natural Community Conservation Planning/Habitat Conservation Plan (NCCP/HCP), with a small area in the southern portion of the IBC proposed as a NCCP reserve area. This area consists of the upland area located between the San Joaquin Freshwater Marsh, the San Diego Creek, MacArthur Boulevard, and Fairchild Road, and is owned and managed by the University of California, Irvine (UCI). While the IBC does not contain any sensitive or regulated habitats, several habitats considered sensitive by the CDFW and the NCCP/HCP adjoin the area. These would include wetland and riparian habitats in the San Joaquin Reserve and Sanctuary areas, as well as within San Diego Creek. Small pockets of coastal sage scrub adjoin the IBC and are known to support nesting territories of the coastal California gnatcatcher.

3.5 Cultural Resources

Historical Resources

In 1876, James Irvine bought out his partners in Flint, Bixby & Co. and became the sole owner of the Irvine Ranch. Just as with the previous ownership, Irvine continued to run Irvine Ranch as a ranching operation for many years. When James Irvine Jr. took over control of the Irvine Ranch, the younger Irvine transitioned the ranch from raising cattle to raising crops. He drilled wells and developed the Irvine Ranch water system, including Irvine Lake, to support the farming operations. In 1887, the San Bernardino and San Diego Railroad, a subsidiary of the Santa Fe Railroad, laid a rail line across the ranch. Buildings to process and pack the ranch's agriculture products were subsequently constructed next to the tracks.

Irvine Ranch was predominately agricultural, containing only sparsely placed farmhouses and associated outbuildings through the 1950s. The Interstate 405 (I-405) was constructed in the mid-1960s, followed closely by increased development. For the remainder of the 20th century, urbanization continued, with commercial development dominating the IBC area, and with residential projects incrementally developed. With the dawning of the 21st century, redevelopment began taking place.

No significant historical resources, as defined by local, state, or federal law, are known to occur within the IBC.

Archeological Resources

Beginning approximately 3,000 years before present (BP), the IBC was in the territory of the Tongva/Gabrielino people. The Tongva/Gabrielino territory encompassed more than 2,500 square miles, stretching from Topanga Canyon in the northwest, Mount Wilson in the north, San Bernardino in the east, Aliso Creek in the southeast, and the Southern Channel Islands. At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. The size of villages varied, with some villages being quite large, housing up to 150 people.

Three known prehistoric archaeological sites occur within the boundaries of the IBC. These sites had cooking features, abundant food refuse, both ground and chipped stone tools, waste from tool creation, ceremonial and ornamental objects, and burials. Archaeological evidence demonstrates that the largest components of the sites date between 5,000 and 1,000 years BP. A portion of one site was preserved from future development with burials intact and preserved. Aside from these sites, the remainder of the IBC does not appear to contain any sensitivity for prehistoric resources.

Paleontological Resources

Surface soils of the IBC consist of recent alluvial sediments deposited by streams and other water sources. Lying at variable depths below the surface, but generally more than six and less than 30 feet deep, is a complex of sand, silt, and clay containing Late Pleistocene (50,000 to 10,000 years old) fossils. Underlying the Pleistocene strata are sands aging from Middle to Early Pleistocene (1.8 million to 50,000 years old) of the San Pedro Formation, containing fossils.

Fossils associated with the IBC include herbivores, carnivores, rabbits, rodents, birds, reptiles, and amphibians. The herbivores include mammoth, mastodon, giant ground sloth,

bison, camel, llama, horse, tapir, peccary, deer, pronghorn, and dwarf pronghorn. The carnivores include bear, saber-toothed cat, jaguar, bobcat, dire wolf, coyote, gray fox, raccoon, weasel, badger, skunk, and sea otter. Known birds include turkey vulture and duck. The smaller animals include many types of rabbits, rats, mice, gophers, wood rats, moles, shrews, lizards, snakes, and salamanders. The known fossils are all from the Pleistocene Epoch and represent the last Ice Age (50,000 to 10,000 years ago).

3.6 Geology and Soils

The majority of the IBC is located at the southern end of the broad Coastal Plain of Orange County, mostly in the Tustin Plain, while a portion of the IBC extends south of I-405 is within the easternmost margin of Newport Mesa. The Tustin Plain is part of the coastal section of the Peninsular Range Province, a 900-mile, predominantly coastal range characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. The Tustin Plain separates the Santa Ana Mountains to the north and east from the San Joaquin Hills to the south. The northwest-trending Santa Ana Mountains have uplifted on their eastern side along the Whittier-Elsinore Fault Zone, producing a tilted, irregular, and complex highland that slopes westward toward the sea.

Sediments eroded from the Santa Ana Mountains and the San Joaquin Hills have been deposited by streams emanating from these highlands (Peters Canyon Wash, San Diego Creek, etc.) and the lower reach of the Santa Ana River, producing the broad, complex, alluvial fan of the Tustin Plain. This alluvial fan consists of relatively flat-lying, unconsolidated to semi-consolidated sediments that are approximately 30 to over 1,200 feet thick beneath the IBC, generally thickening to the northwest. These deposits include strata of the upper member of the Pliocene Fernando Formation (approximately two to three million years old) and Pleistocene (10,000 to two million years old) alluvium. The near-surface, unconsolidated Holocene sediments beneath the IBC are between 10 and 20 feet thick and predominately consist of young alluvial fan deposits. Soil development in the IBC includes well-drained soils of the Alo, Balcom, and Myford Series, which are characteristic of upland and marine terrace deposits, and poorly drained soils of the Chino and Omni Series and Thapto-Histic Fluvaquents, which are characteristic of alluvial fan, floodplain, and coastal basin deposits.

Earthquakes are common to the greater Southern California region, including the IBC and City of Irvine. Earthquake Fault Zones have been identified along known active faults in California in accordance with the Alquist-Priolo Earthquake Fault Zoning Act. Known active and potentially active faults that could produce substantial ground shaking in the IBC include the San Joaquin Hills, Newport-Inglewood (Offshore), Newport-Inglewood (LA Basin), and Whittier-Elsinore Faults. However, no known active surface faults are mapped or traverse the IBC, and the area is not in an Alquist-Priolo Earthquake Fault Zone.

Neither erosion nor subsidence is considered a potential significant geologic hazard in the IBC. However, previous geotechnical investigations have identified the IBC as being susceptible to both expansive and corrosive soils.

Groundwater

Groundwater was encountered at a depth of about 10 to 14 feet below the existing ground surface. A review of the California Department of Mines and Geology's Seismic Hazard Zone Report 012 indicates that historical high groundwater level for the project area is as shallow as 10 feet below the existing ground surface.

Faulting and Seismicity

Based on a review of referenced publications and seismic data, no faults are known to traverse through or immediately adjacent to the project site, and the site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act.

Liquefaction

The site is located within an area mapped as requiting a site-specific liquefaction hazards evaluation. The majority of soils encountered in core penetration tests and nearby borings consist of cohesive, non-liquefiable clays. However, thin layers of silty sands were also encountered. Based on the Preliminary Geotechnical Investigation, it is estimated that the potential total liquefaction-induced settlement will be between 1 and 1.5 inches at the site with a differential settlement of 0.5 to 0.75 inch.

3.7 Greenhouse Gas Emissions

Climate Change and Greenhouse Gas Emissions

Climate change is the variation of Earth's climate over time, whether a result of natural variability or human activity. The climate system is interactive, consisting of five major components: the atmosphere, the hydrosphere (ocean, rivers, and lakes), the cryosphere (sea ice, ice sheets, and glaciers), the land surface, and the biosphere (flora and fauna). The atmosphere is the most unstable and rapidly changing part of the system. It is made up of 78.1 percent nitrogen (N_2), 20.9 percent oxygen (O_2), and 0.93 percent argon (Ar). These gases have only limited interaction with the incoming solar radiation and do not interact with infrared (long-wave) radiation emitted by the Earth. However, there are a number of trace gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and O_3, that absorb and emit infrared radiation, and thus, have an effect on climate. These are defined as greenhouse gases (GHG), and while they comprise less than 0.1 percent of the total volume mixing ratio in dry air, they play an essential role in influencing climate.

Non-CO_2 GHG are those listed in the Kyoto Protocol (CH_4, N_2O, hydrofluorocarbons [HFC], perfluorocarbons [PFC], and sulfur hexafluoride [SF_6]), as well as those listed under the Montreal Protocol and its amendments (chlorofluorocarbons [CFC], hydrochlorofluorocarbons [HCFC], and halons). Water vapor (H_2O) is the strongest GHG, but is also the most variable in its phases (vapor, cloud droplets, ice crystals). However, H_2O is not considered a pollutant in the atmosphere.

IBC Emissions Inventory

An existing GHG emissions inventory of the IBC was conducted for the IBC EIR. This inventory was based on the existing land uses in 2010. Lifecycle emissions were not included in this analysis because comprehensive information was not available for all of the future development in the IBC, and thus, lifecycle GHG emissions would have be speculative. The inventory concluded that the primary source of GHG emissions within the IBC is transportation sources, especially those associated with commuter and commercial vehicles. Non-transportation emissions from structures and associated direct sources of emissions represent a much smaller proportion of IBC's GHG emissions inventory. It is important to note that these emission sources can be controlled, both through physical or regulatory mechanisms.

3.8 Hazards and Hazardous Materials

The IBC is largely urbanized and developed with residential, commercial, industrial, and mixed uses. As part of the mixed-use development model, the IBC Vision Plan and Mixed Use Overlay Zoning Ordinance allows for several different land uses of varying types and intensities to occur close to one another. Searches of various regulatory databases were conducted to understand potential environmental hazards in the IBC and devise measures that would avoid significant impacts to residential uses and other sensitive receptors as a result of these potential environmental hazards.

CalARP Program

In the IBC, the Orange County Fire Authority (OCFA) administers the CalARP Program, which includes the federal Accidental Release Prevention Program (Title 40, CFR Part 68) with certain state-specific additions pursuant to Article 2, Chapter 6.95 of the Health and Safety Code. The purpose of the CalARP Program is to prevent accidental releases of regulated hazardous substances by rigorously evaluating business operations that use and exceed the threshold quantity of a regulated substance. The owner or operator of a stationary source is required to develop and submit a risk management plan (RMP) to prevent accidental releases to the public and the environment. A 2009 review of OCFA records showed that five businesses in the IBC were regulated under CalARP, with RMPs submitted to the OCFA. However, inclusion on the CalARP list does not necessarily insinuate an increased risk level to the surrounding environment.

SCAQMD Title V Permit

In accordance with Title V of the 1990 Clean Air Act Amendments and subsequent EPA requirements, SCAQMD regulates business operations within its jurisdiction that release pollutants into the air through the issuance of permits. A recent review of the SCAQMD Facility Information Detail (FIND) database showed that there are approximately 511 regulated operations in the IBC. Of these regulated facilities within the IBC, eight are identified as “Title V” facilities. Again, inclusion on the SCAQMD Title V list does not necessarily insinuate an increased risk level to the surrounding environment. Title V applies only to major sources, defined by the EPA as facilities emitting or potentially emitting any criteria pollutant or hazardous air pollutant at levels equal to or greater than the major source thresholds.

Regulatory Database Search

Based on an Environmental Data Resources (EDR) database report, which is a compilation of various regulatory databases maintained by governmental agencies, the IBC is the location of numerous sites that have experienced historical releases of hazardous substances into the environment and/or are undergoing environmental investigation or remediation. The database search identified the following types of sites in the general vicinity of the IBC. Listing within the EDR database does not imply that all sites are contaminated or require remediation. Some of the listed sites may have already been granted site closure by a regulatory agency. Additionally, the identified lists are not mutually exclusive. A given site may appear on one or more lists.

- One U.S. Department of Defense site was listed. The Tustin Marine Corps Air Station is located adjacent to and north of the IBC. This site has undergone investigation and remediation activities, including ongoing monitoring for a groundwater contaminant plume.

- 10 sites were listed by the EPA Toxic Chemical Release Inventory System. These sites are identified because of operational releases of toxic substances to the air, water, and land in reportable quantities specified in the Superfund Amendments and Reauthorization Act Title III, Section 313.

- 112 sites were listed on the Cortese list, which is maintained by the State Water Resources Control Board (SWRCB), Integrated Waste Management Board, and the Department of Toxic Substances Control. These sites are listed because of a release of hazardous substances.

- 173 sites were listed on the California Regional Water Quality Control Board (RWQCB) Leaking Underground Storage Tank (LUST) list.

- 41 sites were listed on the California RWQCB Spills Leaks Investigation and Cleanup (SLIC) list.

- 39 sites were listed on the Orange County Industrial Site Cleanups list maintained by the Orange County Health Care Agency.

- 12 sites were listed on the Department of Toxic Substances Control Envirostor database. These sites are listed because of agency involvement with respect to investigation and/or remediation of hazardous substance contamination.

3.9 Hydrology and Water Quality

Surface Water and Drainage

The IBC is located within the San Diego Creek watershed, which is part of the larger Santa Ana River basin. The majority of the local drainage systems in the IBC (approximately 75 percent) discharge to one of three regional facilities within the area: Lane Channel (designated F08 by the Orange County Flood Control District), Armstrong Channel (F08S01), and Barranca Channel (F09), all of which ultimately discharge into San Diego Creek. Armstrong Channel is tributary to Lane Channel at MacArthur Boulevard, which then confluences with San Diego Creek near I-405, south of Jamboree Road. Barranca Channel also connects with San Diego Creek, albeit upstream of Lane Channel's confluence point at Main Street, south of Jamboree Road. A small portion (less than 25 percent) of the IBC drains to San Diego Creek via separate storm drain systems.

Groundwater

The IBC is located within the Irvine Groundwater Management Zone of the lower Santa Ana River basin. As defined in the Santa Ana RWQCB's 1995 (updated 2003) Water Quality Control Plan (Basin Plan), the Irvine Groundwater Management Zone is generally bounded by Newport Bay and the San Joaquin Hills to the south/southwest, the Santa Ana Mountains to the east, and the Orange County Groundwater Management Zone to the north. The IBC is located over the Irvine Subbasin of the Orange County Main Groundwater Basin. The Orange County Water District (OCWD) manages the level of water in this groundwater basin, including the Irvine Subbasin, and this basin provides more than half of the water used within the District. OCWD has an ongoing program for testing water quality, with water in the groundwater basin having been determined to be of sufficient quality and potable when pumped directly from the ground. Approximately 95 percent of the IBC is developed with impervious surfaces, leaving very few permeable surfaces available for groundwater recharge.

Groundwater quality in the Irvine Subbasin has been affected by high concentrations of nitrate, total dissolved soils (TDS), selenium, and contamination from organic compounds. High nitrate and TDS concentrations are likely the result of historic agricultural operations and associated irrigation activities, and thus, primarily impact shallow portions of the regional aquifer. In response to elevated TDS levels, groundwater extraction and treatment projects (also known as desalters) are in operation or planned in the cities of Tustin and Irvine. The desalters are also designed to address other pollutants, including nitrate, selenium, and organic solvents.

Flood Hazards

Based on the most recent Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRMs), the majority of the IBC is located within Zone X, which is defined as areas outside the 0.2-percent annual chance floodplain (500-year floodplain). Lane Channel, Armstrong Channel, and Barranca Channel are all located within Zone A, which is identified as areas within the one-percent annual chance floodplain (100-year floodplain). Additionally, portions of the IBC are located within the dam inundation zone for Land Use and Planning

Irvine Business Complex

The IBC is a business and industrial area encompassing approximately 2,800 acres in the southwestern portion of the City of Irvine. The IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north (known now as Tustin Legacy), San Diego Creek to the east, John Wayne Airport (JWA) and Campus Drive to the south, and State Route 55 (SR-55) to the west. The I-405 traverses the southern portion of the IBC, and the Santa Ana Freeway (I-5) is to the north and east. The IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north.

The IBC also consists of a 40-acre detached parcel that is approximately 0.5 mile south of the primary IBC boundary. This parcel is bounded by Jamboree Road, Fairchild Road, Macarthur Boulevard, and the San Joaquin Marsh. This parcel is adjacent to the City of Newport Beach.

Existing On-site Land Uses

The prominent land use in the IBC is office, along with substantial amounts of industrial, manufacturing, and warehouse uses and several acres of medium- and high-density housing, currently totaling approximately 6,858 existing residential dwelling units. In addition to these existing dwelling units, the IBC EIR and its associated General Plan and Zoning Ordinance amendments allow for 8,142 additional dwelling units for a total of 15,000 base units. Through state density bonus law provisions, qualifying IBC residential projects may increase the number of allowed units such that a maximum total of 17,038 dwelling units would result.

The City's General Plan designates land use within the IBC as Urban and Industrial, providing for office, industrial, and commercial uses mixed with medium- and high-density housing. Other specific uses include medical offices, light and heavy manufacturing, research and development, retail, restaurants, commercial schools, childcare centers, churches, and hotels. The IBC contains a range of industrial and service industries, including specialty pharmaceutical, healthcare and medical products, clothing manufacturers, and other commercial and financial institutions. Because of its proximity to

JWA and centralized location in Orange County, the IBC includes a growing number of other service industries that cater to business and pleasure travelers, including hotels and restaurants.

Existing Surrounding Land Uses

North of the IBC is the location of the former MCAS Tustin, which is currently being redeveloped as Tustin Legacy. The Tustin Legacy redevelopment plan provides for a wide-range of land uses similar in concept to that of the IBC Vision Plan. Some of the residential and commercial portions of the Tustin Legacy redevelopment plan have already been constructed, including a 1,000,000-square-foot regional commercial shopping center at the northwest corner of Jamboree Road and Barranca Parkway, known as The District at Tustin Legacy.

East of the IBC and south of I-405 is the San Joaquin Marsh, a permanently preserved natural area. Southeast of the IBC and adjacent to the marsh is a property owned and operated by UCI. According to the UCI 2007 Long Range Development Plan (LRDP), this site, known as North Campus, which is currently occupied by academic and support facilities, an arboretum, and a child development center, is planned to be redeveloped with up to 950,000 square feet of office/research space and 455 multi-family residential dwelling units by the year 2036.

Southwest of the IBC is JWA, which provides commercial airline service to the greater Orange County area and is surrounded by numerous hotels and restaurants in the cities of Newport Beach and Irvine that currently serve travelers. There is no distinctive boundary that separates the IBC and the City of Newport Beach, as similar mixed-use developments overlap one other in this area, forming a rather cohesive urban form across the boundary.

San Diego Creek, which traverses the southeastern boundary of the IBC, provides an important connection to a comprehensive system of parks, recreational and public facilities, and open space areas within and around the City of Irvine. The San Joaquin Wildlife Sanctuary, which bounds the IBC, offers 10 miles of trails for pedestrians, bicyclists, and equestrian users.

3.10 Mineral Resources

Primarily because of ever-increasing development activity over the years, the greater Orange County area has experienced a noticeable reduction in mineral resources extraction operations throughout the decades. While valuable aggregate resources still remain in areas such as the Santa Ana River, Trabuco Canyon, and San Juan Creek, no valuable or important mineral resources or mining operations currently exist in either the IBC or the City of Irvine. Neither the City's nor the County's General Plan identify the IBC as containing any valuable or important mineral resources or zoned for mineral extraction operations.

3.11 Noise

Existing Noise Environment

The IBC is impacted by many different sources of noise. Mobile sources of noise, primarily commuter and commercial vehicles traveling on local roadways, are the most common and significant noise source in the IBC. Major roadways in the IBC are Alton Parkway, Barranca Parkway, Campus Drive, DuPont Drive, Jamboree Road, MacArthur Boulevard, Main Street, McGaw Avenue, Michelson Drive, Red Hill Avenue, Von Karman Avenue, and the I-405.

Other mobile sources of noise include air traffic generated by JWA, which contributes substantially to the overall ambient noise environment. Secondary noise sources include stationary source such as rooftop HVAC systems.

Roadway Noise

Roadway noise generated from vehicles includes noise associated with engine vibrations, exhaust systems, and the interaction between tires and road. Major arterial roadways in the IBC accommodate large volumes of traffic and are responsible for a significant contribution to the ambient noise environment. Smaller local and collector streets also contribute to the overall ambient noise environment, although to a lesser extent. For the IBC EIR, noise modeling was conducted using the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) based on average daily traffic (ADT) volumes. Noise levels on roadways throughout the IBC, measured at 50 feet from the roadway centerline, ranged from 60.3 A-weighted decibels (dBA) on University Drive east of Irvine Avenue to 80.1 dBA on Jamboree Road between Edinger Road and Warner Avenue.

Aircraft Noise

Aircraft noise generated from air traffic at JWA includes noise associated with takeoffs, flyovers/overflights, approaches, and landings. Each of these activities can expose receptors surrounding the airport to excessive noise levels. Section 21096 of the California Public Resources Code requires that when preparing an EIR for any project within an airport influence area, as defined by an Airport Land Use Compatibility Plan (ALUCP), the lead agency shall use the California Airport Land Use Planning Handbook as a technical resource with respect to airport noise and safety compatibility issues. The basis for compatibility zone delineation for airports is the Community Noise Equivalent Level (CNEL) contours created with the Federal Aviation Administration (FAA) Integrated Noise Model for private and public airports. As outlined in the IBC EIR, 65 dBA CNEL and 60 dBA CNEL contours fall within the western portion of the IBC.

Stationary Sources of Noise

Stationary sources of noise include commercial and industrial equipment and activities associated with the various land uses within and adjacent to the IBC. Whereas mobile noise sources affect many receptors along an entire length of roadway or flight path, stationary noise sources only affect their immediate area. Major stationary sources in the IBC are industrial and warehousing operations. On-site mechanical equipment such as generators and HVAC, along with warehousing and industrial truck traffic, result in noise on local roadways and in the vicinity of industrial operations.

3.12 Population and Housing

According to the most recently available information provided by the City of Irvine, there are approximately 6,858 existing residential units within areas zoned as 5.1 IBC Multi-Use, 5.0 IBC Mixed Use, or 5.3 IBC Residential. Numerous other moderate- and large-scale residential projects are currently either already approved or under review and awaiting approval. Based on the City's recent adoption of 2010 U.S. Census-based population standards, there is an average of 1.46 residents per dwelling unit in high-density residential projects in the City of Irvine. Using this metric, the approximate current population in the IBC is 10,013 residents. By comparison, the 2010 U.S. Census Bureau's 2009-2013 5-Year American Community Survey total population figure for Census Tract 755.15 (inclusive of

the general IBC area) is 14,650 people, including 9,489 people (2010 estimate) in renter-occupied dwellings.

The City's zoning ordinance allows for a total of 15,000 base residential units in the IBC (including density bonus units for affordable housing). Based on the City's recent adoption of 2010 Census-based population standard of 1.46 residents per dwelling unit in high-density residential projects, this equates to roughly 24,875 residents in the IBC upon buildout.

3.13 Public Services

Fire Protection Services

The OCFA currently provides fire protection services to the City of Irvine, including the IBC. In addition to traditional fire protection and emergency medical services, OCFA provides urban search and rescue, fire prevention, hazardous materials coordination, and wildland management services. OCFA facilities serving the IBC include Fire Station #28 (17862 Gillette Avenue), Station #6 (3180 Barranca Parkway), Station #4 (2 Californian Avenue), and Station #36 (301 East Yale Loop).

Police Protection Services

The Irvine Police Department (IPD) presently provides police protection services to the City of Irvine, including the IBC. From their headquarters located at 1 Civic Center Plaza, the IPD provides all services normally associated with public safety, including patrols, investigations, crime analysis, crime prevention, and emergency management/disaster preparedness. The department also has emergency access to helicopter services and mutual aid assistance from surrounding agencies.

Schools

The IBC is located within the enrollment boundaries of the Irvine Unified School District (IUSD), Tustin Unified School District (TUSD), and Santa Ana Unified School District (SAUSD).

The IUSD schools closest to the IBC are Culverdale and Westpark Elementary Schools, South Lake Middle School, and University High School. According to the IBC EIR, in 2009 all four IUSD schools were under capacity. However, a recent review of the 2012-2013 enrollments published by the California Department of Education found that all but South Lake Middle School were over the maximum capacities provided in the IBC EIR.

Parks

Other than a few small pocket parks and several private recreational facilities found within individual residential developments, the IBC does not currently contain any neighborhood or community parks. Instead, the IBC's park and recreational needs are predominately met by the nearby areas, which include several larger public park and recreational facilities, including the San Joaquin Marsh, San Diego Creek Trail, William R. Mason Regional Park (18712 University Drive), Colonel Bill Barber Marine Corps Memorial Park (4 Civic Center Plaza), San Marco Park (1 San Marco), and San Carlo Park (1 San Carlo).

Other Public Facilities

The IBC is served by the University Park Library (4512 Sandburg Way), Heritage Park Regional Library (14361 Yale Avenue), and the Kate Wheeler Library (13109 Old Myford

Road). The three branches total an estimated 43,347 square feet and contain 332,536 volumes. Two senior centers, Lakeview Senior Center (20 Lake Road) and Ranch Senior Center (3 Ethel Coplen Way), provide seniors in the IBC with social and recreational opportunities.

3.14 Recreation

The San Joaquin Marsh is within walking distance of the southernmost portion of the IBC. The San Joaquin Marsh consists of two separately managed areas: the San Joaquin Freshwater Marsh Reserve to the south; and the San Joaquin Wildlife Sanctuary to the north. The Wildlife Sanctuary encompasses 300 acres of coastal freshwater wetlands and 10 miles of trails for pedestrian, bicycle, and equestrian users.

The San Diego Creek Trial, which runs along the southeastern boundary of the IBC, provides an important connection to a comprehensive system of parks and open space developed within the City. In addition to the San Joaquin Wildlife Sanctuary, the San Diego Creek Trail connects to the Mountains to the Sea Trail, which unites recreational users in the IBC to historic Irvine Ranch, northern foothills, the Upper Newport Bay, and the Pacific Ocean.

William R. Mason Regional Park (18712 University Drive) is located approximately two miles from the IBC. The regional park encompasses 345 acres of open spaces, grassy knolls, a lake, and natural areas. Colonel Bill Barber Marine Corps Memorial Park (4 Civic Center Plaza), which is located adjacent to the IBC, serves the area as a community park and connects to the San Diego Creek Trail. Within the IBC, there are also several private recreational facilities found within individual residential developments. These facilities are predominantly gated or indoor facilities serving the residents of the individual residential developments, as described as private neighborhood parks under Section 5-5-1004 of the Irvine Municipal Code, also known as the Subdivision Ordinance.

3.15 Transportation and Traffic

The IBC's study area consists of the current boundaries of the IBC and its surroundings in the City, as well as portions of the cities of Newport Beach (including the entirety of the "airport area" of Newport Beach), Tustin, Santa Ana, Costa Mesa, and unincorporated Orange County. The study area is served by five freeways: SR-73, SR-55, SR-261, I-405, and I-5.

Public and Alternative Transportation

The IBC is currently served by rail transit at the Irvine Metrolink Station located on Barranca Parkway and the Tustin Metrolink Station located on Edinger Avenue.

The IBC is presently served by a number of local bus routes operated by the Orange County Transportation Authority (OCTA) along major thoroughfares and locations within the IBC. The Irvine Shuttle (The iShuttle) is a clean fuel, rubber tire shuttle bus that operates adjacent to and within the study area, primarily transporting commuters and residents throughout the IBC and offering connections to the Irvine and Tustin Metrolink Stations and JWA.

There is an extensive network of recreational and commuter trails that connect to destinations within the IBC. Land uses within the IBC that are required to provide bicycle

parking include, but are not limited to shopping centers (greater than 50,000 square feet of gross floor area), restaurants, and office developments (greater than 100,000 square feet of gross floor area). Within the City, there are 44.5 miles of off-street Class I bikeways and 282 miles of on-street Class II bikeways. The Orange County Bicycle Master Plan, the City of Irvine Bicycle Transportation Plan, and the Irvine General Plan Circulation Element all address bicycle networks in the study area.

With the addition of residential units among the existing predominant office uses in the IBC, there is a growing need for pedestrian transportation amenities such as sidewalks, crosswalks, and other important connections throughout the study area. Development impact fees are expected to contribute to the enhancement of pedestrian facilities in the IBC as residential uses increase.

Existing Conditions

To analyze the potential local and regional traffic impacts that could result from buildout of the IBC, the City's traffic model, Irvine Transportation Analysis Model (ITAM) 8.4, was applied during the IBC EIR evaluation process to forecast future traffic conditions for the study area. There are 275 different arterial segments, 224 intersections, 30 northbound and southbound freeway mainline segments, and 98 freeway ramps within the study area that were evaluated as part of the IBC EIR's traffic analysis.

Under existing conditions, traffic within the City and adjacent jurisdictions is generally heaviest in the north-south direction, with Jamboree Road and Culver Drive being the City's highest utilized north-south corridors. In addition, other heavily traveled north-south arterials include MacArthur Boulevard, University Drive, Main Street in the City of Santa Ana, Edinger Avenue in the City of Tustin, MacArthur Boulevard in the City of Newport Beach, and Bristol Street in the City of Costa Mesa. The following were some of the most heavily traveled arterial segments within the study area:

Jamboree Road

Irvine

- El Camino Real to I-5 NB On-Ramp (61,500 vehicles per day [vpd])
- I-5 NB Ramps to I-5 SB Off-Ramp (65,000 vpd)
- Warner Avenue to Edinger Avenue (78,500 vpd)
- Edinger Avenue to Walnut Avenue (71,900 vpd)
- Warner Avenue to Barranca Parkway (69,500 vpd)
- Michelson Drive to I-405 southbound off-ramp (69,500 vpd)

City of Newport Beach

- MacArthur Boulevard from Bison to Ford (75,900 vpd)

Bristol Street

Costa Mesa

- Anton Boulevard to I-405 NB Ramps (62,500 vpd)
- I-405 NB Ramps to I-405 SB Ramps (63,000 vpd)

Existing arterial traffic conditions were evaluated based on the existing counts and lane configurations. Level of Service (LOS) E or F indicates a deficient segment for all arterial segments outside of the IBC within the City of Irvine. IBC segments are considered deficient at LOS F. The IBC arterial analysis conducted indicated that 12 roadway segments are deficient under the Existing Year 2008 daily conditions, 11 of which are in Irvine.

The City's Traffic Impact Analysis (TIA) Guidelines mandate a peak hour link analysis on all links that exceed the permissible daily LOS threshold applicable to the segment. The City's acceptable threshold is LOS D, unless the arterial segment is located within the IBC, where LOS E is acceptable. All arterial segments that are deficient under daily conditions operate at an acceptable LOS in both peak hours, performing at LOS C or better, and there are no segments within the City that fail under peak hour existing conditions.

The City limits the size and intensity of land uses within the IBC in order to limit the potential negative impacts of traffic generated by each use. Each property in the IBC has an assigned Development Intensity Value (DIV) budget with a maximum allocation of AM peak-hour, PM peak-hour, and average daily DIVs. The IBC has provisions in place to allow for Transfers of Development Rights (TDRs) to allow unused portions of the allocated DIV budget for one property to be transferred to other properties through a process specified in the Zoning Ordinance, which requires among other things the preparation of a traffic study.

3.16 Utilities and Service Systems

Water Services

The Irvine Ranch Water District (IRWD) provides domestic water services to the IBC. IRWD is a multi-service agency that provides potable and recycled water supply and wastewater collection, treatment, and disposal services to a service area encompassing 84,610 acres and a service population of approximately 266,000. IRWD, which serves all of the City of Irvine, is a member agency of the OCWD, and is the largest constituent agency of the Municipal Water District of Orange County (MWDOC). IRWD's decision-making process is guided by two planning documents: the Water Resources Master Plan (WRMP), a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs; and the Urban Water Management Plan (UWMP), a document required by statute.

Sewer Services

The IRWD provides wastewater collection service in the City. The IBC is located in the Orange County Sanitation District (OCSD), tributary zone No. 7 (SD-7). With the exception of the former MCAS Tustin Marine Corps Air Station and a residential area east of the MCAS, the IBC comprises the entirety of SD-7. Wastewater generated in the IBC currently flows to OCSD, and not to IRWD treatment facilities. The IBC wastewater collection system includes over 40 miles of sewer lines, ranging between eight to 66 inches in diameter. There are two IRWD pump stations operational in the IBC: the Michelson Pump Station and the Main Pump Station.

Solid Waste Services

Orange County Integrated Waste Management Department (IWMD) is the agency that regulates and operates the local Orange County landfills, including the Frank R. Bowerman Landfill (11002 Bee Canyon Access Road). Waste Management of Orange County serves as the private waste hauler for residential uses in the City. Bowerman Landfill encompasses

725 acres in the City, including 341 permitted acres for disposal, and is permitted to accept a maximum 11,500 tons of waste per day. The Bowerman Landfill's current closure date is 2053, although it is currently understood that the IWMD is pursuing the required permits for expansion of the facility.

4.0 ENVIRONMENTAL CHECKLIST FORM

1. Project Title: 2015-17 IBC Traffic Improvement Fee Program Update

2. Lead Agency Name and Address:
City of Irvine
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575

3. Project Sponsor's Name and Address:
City of Irvine
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575

4. City Contact Person and Phone Number:
Bill Jacobs, Principal Planner
City of Irvine
Community Development Department
One Civic Center Plaza
Irvine, CA 92623
949-724-6521

5. Project Location(s): The approximately 2,800-acre Irvine Business Complex (IBC) comprises Planning Area 36 in the City of Irvine, in south/central Orange County, as shown in Exhibit 1. More specifically, the IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek channel to the east, John Wayne Airport and Campus Drive to the south, and State Route 55 (SR-55) to the west, as shown on Figure 3 2, Local Vicinity. The San Diego Freeway (I-405) traverses the southern portion of the IBC, and the Santa Ana Freeway (1-5) is to the north and east. The IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north (see Exhibit 1).

6. General Plan Designation: Urban and Industrial

7. Zoning Designation: 5.0 IBC Mixed-Use, 5.1 IBC Multi-Use, 5.2 IBC Industrial, 5.3 IBC Residential

8. Description of Project: This 2015 IBC Vision Plan Five-Year Traffic Study Update fulfills requirements of the City of Irvine Zoning Ordinance, which was updated as part of the 2010 IBC Vision Plan approval to require the City to re-evaluate traffic conditions (and traffic impact locations) by way of a five-year traffic study update (amended to every two years in October 2015). This five-year update evaluates potential traffic impact locations and documents how development actually occurred over the past five years to determine how close the Vision Plan assumptions were to forecasting this condition. The update takes a "snapshot" of the development activity today and considers ambient regional growth to compare with the 2010 assumptions. If as a result of actual development the original traffic impacts are altered or changed, the City has the ability to revise the list of traffic mitigations and IBC fees accordingly within the umbrella of the adopted Vision Plan.

This IBC Vision Plan Five-Year Traffic Study Update analyzes the potential impacts on the circulation system based on updated conditions to the 2010 amendment to

the City of Irvine General Plan that placed a 15,000 dwelling unit limit (plus a maximum of 2,038 density bonus units pursuant to state law) on the residential development in the IBC area. Based on approvals since 2010, the total number of density bonus units assumed for this update is reduced to 1,794 from 2,038. This reduction represents 2,038 assumed theoretical density bonus units in 2010 less 244 theoretical units removed due to reduction in units not associated with any planned project.

The analysis presents areas of deficiency in the existing circulation system and future circulation systems and offers recommended mitigations to allow for a return to acceptable levels of service (LOS) or to the pre-Vision Plan condition within the study area. The analysis focuses on the identification of updated potential traffic impacts on the current circulation system as it is transformed into a mixed-use community from its previous offerings of office, commercial, and industrial uses within the IBC area. This traffic study provides an assessment of the existing conditions in 2015, existing conditions with the updated Vision Plan assumptions, as well as future Interim Year (2020) and Buildout Year (post-2035) scenarios with and without the updated Vision Plan assumptions. A comparison of the impacted locations versus the impacted locations identified in the 2010 IBC Vision Plan Traffic Study is also performed.

9. **Surrounding Land Uses and Setting:** The IBC consists of a range of industrial, office, commercial, and residential uses covering approximately 2,800 acres in the western portion of the City of Irvine. Adjacent to the IBC, on the north, is the City of Tustin and the former MCAS Tustin, currently being redeveloped with residential and commercial uses as part of the Tustin Legacy Specific Plan. A 40-acre parcel of the IBC is detached and to the south of the main IBC boundary area (see Figure 3-3), and bounded by Jamboree Road, Fairchild Road, Macarthur Boulevard, and the San Joaquin Marsh, and adjacent to the City of Newport Beach. The most prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and approximately 7,000 residential units.

10. **Other Public Agencies whose Approval is Required:**

None

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
1	**AESTHETICS** Would the project:							
a)	Have a substantial adverse effect on a scenic vista?							●
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?							●
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?							●
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?							●

2	**AGRICULTURE AND FOREST RESOURCES** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:							
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?							●
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?							●
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?							●
d)	Result in the loss of forest land or conversion of forest land to non-forest use?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
e)	Result in the loss of forest land or conversion of forest land to non-forest use?							●

3	**AIR QUALITY** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:							
a)	Conflict with or obstruct implementation of the applicable air quality plan?							●
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?							●
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?							●
d)	Expose sensitive receptors to substantial pollutant concentrations?							●
e)	Create objectionable odor affecting a substantial number of people?							●

4	**BIOLOGICAL RESOURCES** Would the project:							
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?							●
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but no limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?							●
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?							●
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances?							●
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?							●

5	**CULTURAL RESOURCES** Would the project:							
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?							●
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?							●
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?							●
d)	Disturb any human remains, including those interred outside of formal cemeteries?							●

6	**GEOLOGY AND SOILS** Would the project:	
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?							●
	ii) Strong seismic ground shaking?							●
	iii) Seismic-related ground failure, including liquefaction?							●
	iv) Landslides?							●
b)	Result in substantial soil erosion or the loss of topsoil?							●
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?							●
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?							●
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?							●

7	**GREENHOUSE GAS EMISSIONS** Would the project:							
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?							●
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
8	**HAZARDS AND HAZARDOUS MATERIALS** Would the project:							
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?							●
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?							●
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?							●
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?							●
e)	For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?							●
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?							●
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?							●
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
9	**HYDROLOGY AND WATER QUALITY** Would the project:							
a)	Violate any water quality standards or waste discharge requirements?							●
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?							●
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?							●
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?							●
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?							●
f)	Otherwise substantially degrade water quality?							●
g)	Place housing within a 100-year flood hazard area as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?							●
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?							●
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
j)	Inundation by seiche, tsunami, or mudflow?							●

10	**LAND USE AND PLANNING** Would the project:							
a)	Physically divide an established community?							●
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?							●
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?							●

11	**MINERAL RESOURCES** Would the project:							
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?							●
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?							●

12	**NOISE** Would the project result in:							
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?							●
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?							●

	ISSUES:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum-stances Requiring Major EIR Revisions	New Information - Not Previously Known			Less Than Significant Impact	No Change From Previous Analysis
				Results in New Significant Impacts	Results in More Severe Impacts	New Mitigation Measures Available to Reduce Significant Impacts		
c)	A substantially permanent increase in ambient noise levels in the project vicinity above levels existing without the project?							●
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?							●
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?							●
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?							●

13	**POPULATION AND HOUSING** Would the project:							
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?							●
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?							●
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?							●

14	**PUBLIC SERVICES** Would the project:							
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:							
	i) Fire protection?							●
	ii) Police protection?							●
	iii) Schools?							●
	iv) Parks?							●
	v) Other public facilities?							●

15	**RECREATION** Would the project:							
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?							●
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?							●

16	**TRANSPORTATION** Would the project:							
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?						●	

b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?						●	
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?							●
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?							●
e)	Result in inadequate emergency access?							●
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?							●

17	**UTILITIES AND SERVICE SYSTEMS** Would the project:							
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?							●
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?							●
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?							●
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?							●
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?							●
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?							●

g)	Comply with federal, state, and local statutes and regulations related to solid waste?							●

18	**MANDATORY FINDINGS OF SIGNIFICANCE**							
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?							●
b)	Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?							●
c)	Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?							●

5.0 ENVIRONMENTAL ASSESSMENT

This section provides information and analysis that explains the answers presented in the Environmental Checklist Form found above. Each environmental assessment area includes the following, where applicable:

- Summary of the IBC EIR findings
- Discussion of the proposed project
- Level of significance of the project after mitigation
- Applicable mitigation measures

Applicable Programs, Policies, and Procedures (PPPs), Project Design Features (PDFs), and Mitigation Measures (MMs) found within the IBC EIR are listed within each corresponding environmental assessment area that follows. Refer to Appendix C, which includes both the IBC EIR Executive Summary and Mitigation Monitoring and Reporting Program (MMRP), for a full and complete description of each PPP, PDF, and MM certified within the IBC EIR.

5.1 Aesthetics

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to aesthetics.

Discussion of the Proposed Project

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No Change from Previous Analysis: The project area is located within a relatively flat, urbanized area lacking any significant scenic vistas. The nearest scenic resources to the project site are the San Joaquin Freshwater Marsh, which is located just outside the IBC's southeastern boundary, and the bluffs at the Upper Newport Bay, which are located several miles to the southwest. The proposed project would not affect the view shed of either of these scenic resources. Therefore, similar to the findings of the IBC EIR, no impacts associated with scenic vistas would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Change from Previous Analysis: The nearest Officially Designated State Scenic Highway to the project site is a segment of SR-91, located over 10 miles to the north. Therefore, similar to the findings of the IBC EIR, no impacts associated with scenic highways would occur. The project area contains no protected tree species. The project area consists only of ornamental landscape. Additionally, there are no historic buildings or rock outcroppings located in the project area. Therefore, project implementation would not damage scenic

resources including but not limited to trees, rock outcroppings, or historic buildings within a state scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Change from Previous Analysis: The existing visual character of the project area is defined by the urban and industrial uses. The surrounding area does not exhibit distinct architectural character and there is no uniformity of architectural styles. No unique or scenic visual resources exist on the project site or in its surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Change from Previous Analysis: There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). The project would not create generate new light.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater aesthetic impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.2 Agriculture and Forest Resources

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to agriculture and forest resources.

Discussion of the Proposed Project

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

and

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

and

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

and

d) Result in the loss of forest land or conversion of forest land to non-forest use?

and

e) Result in the loss of forest land or conversion of forest land to non-forest use?

No Change from Previous Analysis [a), b), c), d), and e)]: There is no designated Farmland, land zoned for agricultural use, land under Williamson Act contracts, forest land or timberland, or land zoned for forestry use in the IBC. Therefore, similar to the findings of the IBC EIR, no impacts associated with agriculture and forestry resources would occur.

Level of Significance of the Project After Mitigation

No Impact: No new or substantially greater agriculture and forest resources impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.3 Air Quality

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to:

- Operational activities exposing off-site sensitive receptors to substantial concentrations of NO_2, CO, PM_{10}, and $PM_{2.5}$.
- Creating objectionable odors.

However, the IBC EIR identified that the IBC Vision Plan could result in significant and unavoidable impacts related to:

- The IBC's regional population, housing and employment growth projections not being accounted for in the SCAQMD's 2007 AQMP.
- Construction emissions exceeding the SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$, which would significantly contribute to the nonattainment of designations of the Air Basin for O_3 and particulate matter (PM_{10} and $PM_{2.5}$).

- Operational emissions exceeding the SCAQMD's regional significance threshold and significantly contributing to the nonattainment designations of the Air Basin for O_3 and particulate matter (PM_{10} and $PM_{2.5}$).

- Construction activities exposing sensitive receptors to substantial concentrations of NO_x, PM_{10}, and $PM_{2.5}$.

- Placing residential uses within ARB's recommended buffer distances from I-405 or existing distribution centers, chrome platers, dry cleaners, or gas stations.

Discussion of the Proposed Project

The following analysis is based in part on the August 2015 Air Quality and Greenhouse Gas Analysis Report prepared by LSA Associates, Inc. and the September 2015 Health Risk Assessment (HRA) Report prepared by FirstCarbon Solutions. Both reports are included as appendices to this Addendum.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Change from Previous Analysis: The IBC EIR found that regional growth projections in the IBC were not accounted for in the SCAQMD's 2007 AQMP. However, since certification of the IBC EIR, the SCAQMD has prepared and adopted an updated 2012 AQMP that accounts for existing population and projected planned growth within the IBC.

According to the 1993 SCAQMD Handbook, there are two key indicators of consistency with the AQMP:

1. Indicator: Whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

   Project applicability: Applicable and assessed below.

2. Indicator: A project would conflict with the AQMP if it will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

   Project applicability: The Handbook indicates that key assumptions to use in this analysis are population number and location and a regional housing needs assessment. The parcel-based land use and growth assumptions and inputs used in the Regional Transportation Model run by SCAG that generated the mobile inventory used by the SCAQMD for AQMP are not available. Therefore, this indicator is not applicable.

Considering the recommended criteria in the 1993 SCAQMD Handbook, this analysis uses the following criteria to address this potential impact:

- Step 1: Project's contribution to air quality violations (SCAQMD's first indictor)

- Step 2: Assumptions in AQMP (SCAQMD's second indictor)
- Step 3: Compliance with applicable emission control measures in the AQMPs

Step 1: Project's Contribution to Air Quality Violations

According to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

As addressed in Impact 6.3.b) below, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

If a project's emissions exceed the SCAQMD regional thresholds for NO_x, VOC, PM_{10}, or $PM_{2.5}$, it follows that the emissions could cumulatively contribute to an exceedance of a pollutant for which the basin is in nonattainment (O_3, NO_2, PM_{10}, $PM_{2.5}$) at a monitoring station in the Air Basin. An exceedance of a nonattainment pollutant at a monitoring station would not be consistent with the goals of the AQMP, which are to achieve attainment of pollutants.

As discussed in Impact 6.3.c) below, the project would not exceed the regional significance thresholds.

Step 2: Assumptions in AQMP

According to Chapter 12 of the SCAQMD Handbook, the purpose of the consistency finding is to determine whether a project is inconsistent with the assumptions and objectives of the regional air quality plans and, thus, whether it would interfere with the region's ability to comply with federal and state air quality standards. If a project is inconsistent, local governments need to consider project modifications or inclusion of mitigation to eliminate the inconsistency. Consistency with the AQMP implies that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the national and state air quality standards. To assess the environmental impacts of new or renovated developments accurately, environmental pollution and population growth are projected for future scenarios.

The development of emission burdens used in air quality management plans to demonstrate compliance with ambient air quality standards is based, in part, on land use patterns contained within local general plans. Thus, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and if the general plan was adopted prior to the applicable AQMP, then the growth generated by a project would be consistent with the growth assumed within the AQMP.

The Irvine General Plan has designated the project area as Urban and Industrial, which supports higher density residential development. Since the project's intended actions are consistent with the current City's General Plan, implementation of the project would not require any amendments to the General Plan designations for the project site. Therefore, the project would be within the City's General Plan designation and is consistent with the adopted AQMP according to this criterion.

Step 3: Control Measures

This step involves assessing the project's compliance with the control measures in the AQMPs.

2003 AQMP. The 2003 AQMP contains a number of land use and transportation control measures, including the SCAQMD's Stationary and Mobile Source Control Measures, State Control Measures proposed by ARB, and Transportation Control Measures provided by SCAG. ARB's strategy for reducing mobile source emissions include the following approaches: new engine standards; reduce emissions from in-use fleet, require clean fuels, support alternative fuels and reduce petroleum dependency, work with EPA to reduce emissions from national and state sources, and pursue long-term advanced technology measures. Transportation control measures provided by SCAG include those contained in their RTP/SCS, the most current version of which is the 2012-2035 RTP/SCS. The RTP/SCS contains control measures to reduce emissions from on-road sources by incorporating strategies such as high occupancy vehicle interventions, transit, and information-based technology interventions. The project is assumed to indirectly comply with these control measures.

2007 AQMP. The focus of the 2007 AQMP is to demonstrate attainment of the federal $PM_{2.5}$ ambient air quality standard by 2015 and the federal 8-hour ozone standard by 2024, while making expeditious progress toward attainment of state standards. This is to be accomplished by building upon improvements from the previous plans and incorporating all feasible control measures while balancing costs and socioeconomic impacts. The 2007 AQMP indicates that $PM_{2.5}$ is formed mainly by secondary reactions or sources. Therefore, instead of reducing fugitive dust, the strategy for reducing $PM_{2.5}$ focuses on reducing precursor emissions of SO_x, directly emitted $PM_{2.5}$, NO_x, and VOC.

The Final 2007 AQMP control measures consist of four components. The first component is SCAQMD's Stationary and Mobile Source Control Measures. The Final 2007 AQMP includes 30 short-term and mid-term stationary and seven mobile source control measures for SCAQMD implementation. A complete listing of the measures is in the 2007 AQMP and includes measures such as VOC reductions from gasoline transfer and dispensing facilities, further NO_x reductions from space heaters, localized control program for PM emission hot spots, urban heat island, energy efficiency and conservation, etc. Some of the measures have/will become new rules and some have/will be amendments to existing rules. When the pending rules pass, all new development project would be required to follow any applicable rules.

The second component is ARB's Proposed State Strategy, which includes short- and mid-term control measures aimed at reducing emissions from sources that are primarily under state jurisdiction, including on-road and off-road mobile sources, and consumer products. These measures are required in order to achieve the remaining emission reductions necessary for $PM_{2.5}$ attainment. ARB's strategy includes measures such as improvements to California's Smog Check Program, expanded passenger vehicle retirement, cleaner in-use heavy-duty trucks, reductions from port-related sources, cleaner off-road equipment, evaporative and exhaust strategies, pesticide strategies, etc. When these measures are implemented by the ARB, the project would be required to follow them.

The third component is SCAQMD Staff's Proposed Policy Options to Supplement ARB's Control Strategy. SCAQMD staff believes that a combination of regulatory actions and public funding is the most effective means of achieving emission reductions. As such, the 2007 Final AQMP proposes three policy options for the decision makers to consider in achieving additional reductions. The first option is to incorporate the SCAQMD proposed additional

control measures as a menu of selections, further reducing emissions from sources primarily under state and national jurisdiction. The second option is to have the State fulfill its NO_x emission reduction obligations under the 2003 AQMP by 2010 for its short-term defined control measures plus additional reductions needed to meet the NO_x emission target between 2010 and 2014. The third option is based on the same rate of progress under the aforementioned first option, but it relies heavily on public funding assistance to achieve the needed NO_x reductions via accelerated fleet turnover to post-2010 on-road emission standards or the cleanest off-road engine standards in effect today or after 2010. This strategy does not apply to the project.

The fourth component consists of Regional Transportation Strategy and Control Measures provided by SCAG. Transportation plans within the Basin are required by statute to conform to air quality plans in the region, as established by the 1990 Federal Clean Air Act and reinforced by other Acts. The region must demonstrate that its transportation plans and programs conform to the mandate to meet the federal ambient air quality standards in a timely manner. The Regional Transportation Plan, prepared by the SCAG, is developed every four years with a 20-year planning horizon to meet the long-term transportation planning requirements for emission reductions from on-road mobile sources within the basin. The biennial Regional Transportation Improvement Program requires that the short-term implementation requirements of the Transportation Conformity Rule be met by SCAG. The first two years of the program are fiscally constrained and demonstrate timely implementation of a special category of transportation projects called Transportation Control Measures. In general, Transportation Control Measures are those projects that provide emission reductions from on-road mobile sources, based on changes in the patterns and modes by which the regional transportation system is used. Strategies are grouped into three categories: high occupancy vehicle strategy, transit and systems management, and information-based technology (traveling during a less congested time of day). SCAG approved the transportation measures in their RTC/SCS, which have been included in the region's air quality plans. The Transportation Control Measures will be implemented and will subsequently reduce emissions in the Basin.

2012 AQMP. The 2012 AQMP was adopted December 7, 2012. The purpose of the 2012 AQMP for the Basin is to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update of the Basin's projections in meeting the federal 8-hour O_3 standards. Similar to the prior AQMPs, the project would comply with all applicable rules and regulations enacted as part of the AQMP. In addition, as discussed in the Regulatory section, the AQMP relies upon the SCAG Regional Transportation Strategy, which is in its adopted 2012-2035 RTP/SCS and in the 2011 Federal Transportation Improvement Program. Included in the RTP/SCS are regional transportation strategy and transportation control measures that include the following: active transportation (non-motorized transportation – biking and walking), transportation demand management, transportation system management, transit, passenger and high-speed rail, goods movement, aviation and airport ground access, highways, arterials, and operations and maintenance.

Geographical areas in the state that exceed the federal air quality standards are called nonattainment areas. The project area is in nonattainment for O_3, PM_{10}, $PM_{2.5}$, and NO_2. State Implementation Plans (SIPs) show how each area will attain the federal standards. To do this, the SIPs identify the amount of pollutant emissions that must be reduced in each area to meet the standard and the emission controls needed to reduce the necessary emissions. On September 27, 2007, ARB adopted its State Strategy for the 2007 SIP. In 2009, the SIP was revised to account for emissions reductions from regulations adopted in

2007 and 2008 and clarifies ARB's legal commitment. A 2011 Progress Report found that the Basin is currently 94 percent of the way towards achieving the 2014 emissions levels identified in its $PM_{2.5}$ SIP. The SIP takes into account ARB rules and regulations. The project would be required to comply with all applicable rules and regulations.

Summary

Analysis Step 1: The project would not contribute to air quality violations because its construction emissions do not exceed the SCAQMD localized significance thresholds. In addition, project construction and operational emissions do not exceed the SCAQMD's regional significance thresholds. Therefore, the project is consistent with this criterion.

Analysis Step 2: The project would be consistent with the Irvine General Plan land use designation and is consistent with the adopted AQMP. Therefore, the project is consistent with this criterion.

Analysis Step 3: Similar to all other new development projects, the project would be required to comply with all applicable SCAQMD and SCAG rules and regulations. Therefore, the project is consistent with this criterion.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

No Change from Previous Analysis: The IBC EIR found that construction emissions associated with buildout of the IBC would generate short-term emissions that exceed the SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$. IBC PPP 2-1 through PPP 2-4 and PDF 2-6 through PDF 2-9 would reduce air pollutant emissions generated during construction activities to the extent feasible. However, the IBC EIR determined that buildout of the IBC would have the potential for air quality standard violation from construction activities, and concluded that this impact was significant and unavoidable. The proposed project would not create any new air quality impact beyond impacts previously analyzed and mitigated.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

No Change from Previous Analysis: Regarding this impact, for the project to result in a less than significant effect, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the regional significance thresholds. This is an approach recommended by the SCAQMD in its comment letters.
2. Summary of projections: the project must be consistent with current air quality attainment plans including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court

decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-20.

Step 1: Regional Analysis

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The Air Basin is in nonattainment for PM_{10}, $PM_{2.5}$, NO_2, and O_3. Therefore, if the project exceeds the regional thresholds for PM_{10}, or $PM_{2.5}$, then it contributes to a cumulatively considerable impact for those pollutants. If the project exceeds the regional threshold for NO_x or VOC, then it follows that the project would contribute to a cumulatively considerable impact for O_3. If the project exceeds the NO_x threshold, it could contribute cumulatively to NO_2 concentrations.

Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the SCAQMD because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin region with regional emissions in excess of any of the thresholds are considered to have a significant regional air quality impact. The proposed project would not create any new air quality impact beyond impacts previously analyzed and mitigated.

Step 2: Plan Approach

Section 15130(b) of the CEQA Guidelines states the following:

> The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

In accordance with CEQA Guidelines Section 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. This analysis considers the current CEQA Guidelines, which includes the recent amendments approved by the Natural Resources Agency and effective on March 18, 2010. This analysis is based on the 2003 and 2007 AQMPs. The Basin is in nonattainment for O_3, PM_{10} and $PM_{2.5}$, and NO_2, which means that concentrations of those pollutants currently exceed the ambient air quality standards for those pollutants. When concentrations of O_3, PM_{10}, $PM_{2.5}$, and NO_2 exceed the ambient air quality standard, those sensitive to air pollution (such as the elderly, children, and the sick) could experience health effects such as decrease of pulmonary function and localized lung edema in humans and animals, increased mortality risk, and risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans.

Under the current CEQA Guidelines, cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The AQMPs describe and evaluate the future

projected emissions sources in the Basin and set forth a strategy to meet both state and federal Clean Air Act planning requirements and federal ambient air quality standards. Thus, the AQMPs are relevant plans for CEQA cumulative impacts analysis. The 2003 AQMP updates the attainment demonstration for the federal standards for O_3 and PM_{10}; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992. The 2007 AQMP focuses on O_3 and $PM_{2.5}$, and also incorporates significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling.

The geographic scope for cumulative criteria pollution from air quality impacts is the Basin, because that is the area in which the air pollutants generated by the sources within the basin circulate and are often trapped. The SCAQMD is required to prepare and maintain an AQMP and a SIP to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SCAQMD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning are necessary to maintain clean air. The SCAQMD evaluated the entire Basin when it developed the AQMP.

In accordance with CEQA Guidelines Section 15064(h)(3), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously approved plan or mitigation program. As discussed in Impact 6.3a), the project complies with the control measures in the 2003 and the 2007 AQMP and all applicable SCAQMD rules and regulations. The project would not exceed the SCAQMD's CEQA significance thresholds; the analysis contained in Impact 6.3a) demonstrates that the project is consistent with the most recent AQMP and SIP without mitigation.

Step 3: Cumulative Health Impacts

The Air Basin is in nonattainment for O_3, NO_2, PM_{10}, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as the elderly, children, and the sick). Thus, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects. However, the health effects are a factor of the dose-response curve; concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are all factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not necessarily mean that 100 percent of the population would experience health effects.

The regional analysis of construction and operational emissions indicates that the project would not exceed the SCAQMD regional significance thresholds, and the project would not result in cumulative health impacts.

d) Expose sensitive receptors to substantial pollutant concentrations?

No Change from Previous Analysis: The IBC EIR found that construction activities could expose sensitive receptors to substantial pollutant concentrations of NO_x, PM_{10}, and $PM_{2.5}$. With regard to long-term operations of the IBC, development of new residential uses and associated outdoor public recreational areas within 500 feet of I-405 could expose sensitive

receptors to diesel particulates and other pollutants. Development of residential uses within specified distances of certain types of industrial uses (e.g., truck bays of existing distribution center; existing chrome plating facility, dry cleaning facilities, gas-dispensing facilities) could expose sensitive receptors to toxic air contaminants (TACs). The proposed project would not create any new air quality impact beyond impacts previously analyzed and mitigated.

Sensitive Receptors

Those individuals who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as NO_2 and CO), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

The closest sensitive receptor to the project site is an apartment complex located adjacent to the project site's eastern boundary. Additionally, once operational, the project's residents would also represent sensitive receptors within the context of being impacted by surrounding sources of air emissions.

Localized Significance Threshold Analysis

The localized construction analysis uses thresholds that represent the maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The thresholds are developed on the basis of the ambient concentrations of that pollutant for each SRA and on the location of the sensitive receptors. If the project results in emissions under those thresholds, it follows that the project would not cause or contribute to an exceedance of the standard. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded at the sensitive receptor locations, it follows that the receptors would not be exposed to substantial pollutant concentrations.

As discussed in Impact 6.3b), the localized construction and operational analysis demonstrated that the project would not exceed the LSTs for NO_x, CO, PM_{10}, or $PM_{2.5}$. Therefore, construction and operation of the project would not expose sensitive receptors to substantial pollutant concentrations of NO_x, CO, PM_{10}, or $PM_{2.5}$.

CO Hot Spot Assessment

As also addressed in Impact 6.3b), a CO hot spot analysis is the appropriate tool to determine if project emissions of CO during operation would exceed ambient air quality standards. The main source of air pollutant emissions during operation are from off-site motor vehicles traveling on the roads surrounding the project. The CO hot spot analysis demonstrated that emissions of CO during operation would not result in an exceedance of the most stringent ambient air quality standards for CO. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded, then the sensitive individuals would not be significantly impacted. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact.

Criteria Pollutant Analysis

The main source of air pollutant emissions during operation are from off-site motor vehicles traveling on the roads surrounding the project. As shown in Impact b), the project would not

exceed the SCAQMD's local significance thresholds for construction or operational emissions. Therefore, according to this criterion, air pollutant emissions during operation would result in a significant and unavoidable impact.

Toxic Air Pollutants – On-site Workers

A variety of state and national programs protect workers from safety hazards, including high air pollutant concentrations (California OSHA and CDC 2012).

On-site workers are not required to be addressed through this health risk assessment process. A document published by the California Air Pollution Control Officers Association (CAPCOA 2009), Health Risk Assessments for Proposed Land Use Projects, indicates that on-site receptors are included in risk assessments if they are persons not employed by the project. Persons not employed by the project would not remain on-site for any significant period. Therefore, a health risk assessment for on-site workers is not required or recommended.

Toxic Air Pollutants –Construction

The construction equipment would emit DPM, which the ARB has identified as a carcinogen. However, the DPM emissions during construction are short-term in nature. Guidance published by the California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, does not include guidance for health risks from construction projects addressed in CEQA; risks near construction projects are expected to be included later when the toxic emissions from construction activities are better understood. Therefore, exposure to DPM during construction is anticipated to be less than significant health impact.

Toxic Air Pollutants –Operation

The SCAQMD requires all facilities that utilize stationary equipment that emit air emissions or TACs to obtain an air permit, and the details of each air permit are provided at the above website. Air permits are required for chrome plating operations, facilities that use Hexavalent Chromium, dry cleaning facilities, gas stations, and from any industrial facility that releases TACs. If a facility is also a truck distribution center, then the SCAQMD also requires that the facility provide information on how many trucks per day operate at the facility and how many of those trucks have operational TRUs.

The project is an area-wide program not subject to the screening distances provided in Sections 5-8-4(f) and (g) of the Zoning Ordinance and therefore a quantitative HRA is not required for the proposed project.

e) Create objectionable odor affecting a substantial number of people?

No Change from Previous Analysis: The IBC EIR found that new land uses within the IBC would not create objectionable odors. However, new residential uses could be close to existing odor generators. The project does not involve changes in land use that would generate new odors.

Level of Significance of the Project After Mitigation

No Change from Previous Analysis: No new or substantially greater air quality impacts to the IBC as modified with the pending project would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

plans.

5.4 Biological Resources

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to biological resources.

Discussion of the Proposed Project

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

and

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?

and

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but no limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

and

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

and

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances?

and

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Change from Previous Analysis [a), b), c), d), e), and f)]: The project area consists of previously developed land in an urbanized setting and contains no native habitat. The project area is landscaped with several non-native species of trees, ornamental shrubs, and sod grass. The area of the IBC affected by the project does not contain any wetlands, riparian habitat, jurisdictional drainage features, or sensitive natural communities identified in local or regional plans, policies, or regulations, or that are otherwise regulated by CDFW or USFWS. No federally or state-listed endangered or threatened plant or animal species or any other special status species are known to occur within the project area. Therefore, similar to the findings of the IBC EIR, impacts associated with biological resources would result in a less than significant impact.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater biological resources impacts to the IBC as modified with the pending project would occur. No mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.5 Cultural Resources

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to cultural resources.

Discussion of the Proposed Project

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

and

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

and

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

and

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Change from Previous Analysis [a), b), c), and d)]: The IBC is located in a predominantly urbanized setting. Both surface and shallow subsurface soils have been previously

disturbed, and thus, there is low potential to encounter significant prehistorical or historical resources within the modern ground surface. According to Figure E-1 of the Cultural Resources Element of the Irvine General Plan, there are no recorded or known archaeological or historic sites on the project site or in the surrounding area.

There is little chance that human remains would be encountered during grading activities. Records indicate that no human remains have ever been found on or near the project site, and that the chance that human remains could be encountered during grading activities is extremely low because of prior disturbance of the project site. Thus, a plan to mitigate for potential impacts to human remains during construction is not required. Therefore, similar to the findings of the IBC EIR, impacts associated with cultural resources would result in a less than significant impact.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater cultural resources impacts to the IBC, as modified with the pending project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.6 Geology and Soils

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to geology and soils.

Discussion of the Proposed Project

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault?

No Change from Previous Analysis: The project area would be subject to strong ground shaking resulting from earthquakes on nearby active faults. However, there are no known active or potentially active faults or fault traces crossing the project site. Thus, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. Therefore, similar to the findings of the IBC EIR, no impacts associated with fault rupture would occur.

ii. Strong seismic ground shaking?

No Change from Previous Analysis: Ground shaking generated by fault movement would be considered a potentially significant impact that may affect the project area. The project does

not propose any changes to soil or geology conditions. Therefore, similar to the findings of the IBC EIR, impacts associated with strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

No Change from Previous Analysis: As determined by the California Geological Survey, the project area is susceptible to liquefaction. The project does not propose any changes to soil or geology conditions. Therefore, similar to the findings of the IBC EIR, impacts associated with seismic ground failure, including liquefaction would be less than significant.

iv. Landslides?

No Change from Previous Analysis: As determined by the California Geological Survey, the project area is not susceptible to landslide. Additionally, because of the lack of slopes on or around the project site, no landslides are anticipated to occur. Therefore, similar to the findings of the IBC EIR, no impacts associated with landslides would occur.

b) Result in substantial soil erosion or the loss of topsoil?

No Change from Previous Analysis: The project does not propose any changes to soil or geology conditions. Therefore, similar to the findings of the IBC EIR, impacts associated with soil erosion or topsoil loss would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Change from Previous Analysis: The project does not propose any changes to soil or geology conditions. Therefore, similar to the findings of the IBC EIR, impacts associated with unstable geologic soils would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Change from Previous Analysis: The project does not propose any changes to soil or geology conditions. Therefore, similar to the findings of the IBC EIR, impacts associated with expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Change from Previous Analysis: The project does not propose any changes to soil or geology conditions affecting water or wastewater. Therefore, similar to the findings of the IBC EIR, no impacts associated with septic tanks or alternative wastewater disposal systems would occur.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater geology and soils impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.7 Greenhouse Gas Emissions

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to GHG emissions.

Discussion of the Proposed Project

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold Development

A variety of agencies have developed GHG emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of the SCAQMD remain in flux. The CAPCOA explored a variety of threshold approaches, but did not recommend one approach (CAPCOA, 2008). The ARB recommended approaches for setting interim significance thresholds (ARB 2008), in which a draft industrial project threshold suggests that non-transportation-related emissions under 7,000 $MTCO_2e$ per year would be less than significant; however, the ARB has not approved those thresholds and has not published anything since then. The Bay Area Air Quality Management District and the San Joaquin Valley Air Pollution Control District have both developed GHG thresholds. However, those thresholds are not applicable to the project since the project is under the jurisdiction of the SCAQMD. The SCAQMD is in the process of developing thresholds, as discussed below.

On December 5, 2008, the SCAQMD Governing Board adopted an interim GHG significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). The SCAQMD permit threshold consists of five tiers, as follows:

- Tier 1 consists of evaluating whether or not a project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.

- Tier 3 is a screening threshold level to determine significance using a 90 percent emission capture rate approach and is 10,000 $MTCO_2e$ per year (with construction emissions amortized over 30 years and added to operational emissions).

- Tier 4 was not approved in the interim greenhouse gas threshold.

- Tier 5 would allow the project proponent to purchase off-site mitigation to reduce greenhouse gas emissions to less than the screening level (in Tier 3).

The SCAQMD is in the process of preparing recommended significance thresholds for GHGs for local lead agency consideration (SCAQMD draft local agency threshold); however, the SCAQMD Board has not approved the thresholds as of the date of this analysis. The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.

- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:

  - All land use types: 3,000 $MTCO_2e$ per year
  - Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; industrial: 10,000 $MTCO_2e$; or mixed use: 3,000 $MTCO_2e$ per year

- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans;
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD discusses its draft thresholds in the following excerpt (SCAQMD 2008):

> The overarching policy objective with regard to establishing a GHG [greenhouse gas] significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimate contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It

is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.

As described below, staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

Therefore, the policy objective of staff's recommended interim GHG significance threshold proposal for project's where the SCAQMD is the lead agency is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that staff estimates that these GHG emissions would account for less than one percent of future 2050 statewide GHG emissions target (85 $MMTCO_2e$/yr). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory.

In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

Thresholds of Significance for this Project

To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, this analysis utilizes the SCAQMD's draft local agency tiered threshold. The threshold is as follows:

- Tier 1: The project is not exempt under CEQA; go to Tier 2.
- Tier 2: There is no greenhouse gas reduction plan applicable to the project; go to Tier 3.
- Tier 3: project greenhouse gas emissions compared with the threshold: 3,500 $MTCO_2e$ per year (see analysis below)

Section 15064.4(b) of the CEQA Guideline amendments for greenhouse gas emissions state that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Greenhouse Gas Inventory

The project does not change land use and GHG assumptions from the 2010 IBC EIR, therefore no new inventory was prepared,

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Change from Previous Analysis [a) and b)]: The IBC EIR found that the IBC project would not result in a significant impact on GHG emissions. All new development projects within the IBC would be reviewed for conformance with applicable IBC PPPs and PDFs and additional measures in Section 9-36-20, *Environmental Standards*, of the Zoning Ordinance related to GHG reduction. New development would be required to demonstrate compliance with applicable GHG emissions reduction measures in conformance with the IBC EIR and Section 9-36-20 of the Zoning Ordinance. Therefore, similar to the findings of the IBC EIR, impacts associated with GHG emissions would be less than significant.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater global climate change impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.8 Hazards and Hazardous Materials

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to hazards and hazardous materials.

Discussion of the Proposed Project

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Change from Previous Analysis: The IBC EIR found that the IBC project would not result in a significant impact related to hazards and hazardous materials. All new development projects within the IBC would be reviewed for conformance with applicable IBC PPPs and PDFs and additional measures in Section 9-36-20, *Environmental Standards*, of the Zoning Ordinance. New development would be required to demonstrate compliance with applicable hazards and hazardous materials- related measures in conformance with the IBC EIR and Section 9-36-20 of the Zoning Ordinance. Therefore, similar to the findings of the IBC EIR, impacts associated with GHG emissions would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Change from Previous Analysis: Any transport, use, or disposal of hazardous materials would comply with all applicable federal, state, and local requirements. Both construction and operation of the project would comply with the policies and programs set forth by all applicable federal, state, and local agencies, including the EPA, DTSC, Cal/OSHA, Caltrans, RCRA, OCHCA, and the OCFA. Adherence with the applicable provisions of these agencies would ensure that any interaction with hazardous materials occurs in the safest possible manner, reducing the opportunity for the accidental release of hazardous materials into the environment. As required by the U.S. Occupational Safety and Health Administration (OSHA), all hazardous materials stored on development sites will be accompanied by a Material Safety Data Sheet, which, in the case of accidental release, will inform personnel as to the necessary remediation procedures.

Residential development applicants would also be required to provide a Notification Letter and Safety Plan in accordance with the City of Irvine Good Neighbor Program. This letter is sent to businesses in proximity to new residential developments to inform them of the presence of the pending sensitive land use. The letter then requires those businesses to notify residents of any accident at the businesses that may involve the release of hazardous substances. The Good Neighbor Program would also require the project Applicant to prepare a safety plan that includes staff training, emergency tools, first aid provisions, supervision of children or other individuals in an emergency, and a shelter-in-place program for when evacuation is not appropriate or practicable. Therefore, similar to the findings of the IBC EIR, impacts associated with upset or accident conditions involving the release of hazardous materials would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Change from Previous Analysis: The proposed project does not change land use assumptions or intensity allocations from current conditions.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Change from Previous Analysis: The proposed project does not change land use assumptions or intensity allocations from current conditions. Affected sites within the project area have were identified in the IBC EIR and updated with each new affected development project.

e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Change from Previous Analysis: The project site is located within the Orange County Airport Land Use Commission's (ALUC) Airport Environs Land Use Plan (AELUP) height restriction zone identified in the IBC EIR. Building height limits within this restricted zone are determined in accordance with Part 77 (Objects Affecting Navigable Airspace) of the FAA regulations. Prior to project approval, the height of the residential building would be determined to ensure that the structure does not exceed height limitations as defined in Part 77.25 of the FAA regulations. The project does not propose changes to current building height allowances. Therefore, similar to the findings of the IBC EIR, impacts associated with public airport hazards would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Change from Previous Analysis: The IBC is is not within the vicinity of a private airstrip. Therefore, similar to the findings of the IBC EIR, no impacts associated with private airstrip safety hazards would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Change from Previous Analysis: Proposed improvements as part of the project facilitate emergency access, response and evacuation. *Therefore, similar to the findings of the IBC EIR, impacts associated with an emergency response plan or emergency evacuation plan would be less than significant.*

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Change from Previous Analysis:, Because of the project location in an urbanized setting and OCFA standards for new development, the project would not expose people or structures to hazardous wildfire conditions. Therefore, similar to the findings of the IBC EIR, no impacts associated with wildland fires would occur.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater hazardous and hazardous materials impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.9 Hydrology and Water Quality

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to hydrology and water quality.

Discussion of the Proposed Project

Would the project:

a) Violate any water quality standards or waste discharge requirements?

and

f) Otherwise substantially degrade water quality?

No Change from Previous Analysis [a) and f)]:

The project does not change current hydrologic patterns or water quality conditions. Compliance with existing federal, date and local regulations would be required for construction of new roadway improvements at time of design and construction. Therefore, similar to the findings of the IBC EIR, impacts associated with water quality standards would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Change from Previous Analysis: The project area does not serve as a groundwater recharge area. Because of the large amount of existing impervious areas in the IBC, no appreciable groundwater infiltration occurs under the current condition. The IBC EIR found that there is adequate potable water available to serve the project area. Therefore, similar to the findings of the IBC EIR, no impacts associated with water groundwater supplies or recharge would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

and

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?

and

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Change from Previous Analysis [c), d), and e)]: The project area is largely covered with impervious surfaces in the form of buildings and paved asphalt parking lots. The storm drain system in the project area currently has sufficient capacity to accommodate stormwater runoff from the project site and surrounding area.. Because the project area is currently developed and connected to a storm drain system (as opposed to a natural stream), and no increases in peak flow rates would be expected, erosion and subsequent siltation of downstream waters is not a concern. Therefore, similar to the findings of the IBC EIR, impacts associated with drainage patterns, on- or off-site erosion or siltation, drainage volumes and velocities, and downstream flooding would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

and

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

and

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Change from Previous Analysis [g), h), and i)]: According to a review of FIRMs published by FEMA, the affected portions of the project area are located outside of a 100-year flood hazard area. However, portions of the IBC, are located within the dam inundation zone for Prado Dam, which encompasses a large portion of Orange County. Nonetheless, given the distance of this dam from the project area, as well as the extreme remoteness of a dam failure, the risk of inundation and flooding would be low. Therefore, similar to the findings of the IBC EIR, impacts associated with flooding would be less than significant.

j) Inundation by seiche, tsunami, or mudflow?

*No Change from Previous Analysis: T*he project area is not located along the coastline, or adjacent to an enclosed body of water, or near an exposed hillside. Therefore, similar to the findings of the IBC EIR, no impacts associated with seiche, tsunami, or mudflow would occur.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater hydrology and water quality impacts to the IBC, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.10 Land Use and Planning

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to land use and planning.

Discussion of the Proposed Project

Would the project:

a) Physically divide an established community?

No Change from Previous Analysis: The project site is located in a largely urbanized area and is generally bound by roadways, office, and industrial uses. There are no existing established communities on or adjacent the project site and the site does not provide connectivity between any established communities. Additionally, all planned improvements constructed and installed as part of the project would not extend off-site and potentially divide any established community in the general vicinity of the project site. Therefore, similar to the findings of the IBC EIR, impacts associated with division of an established community would be less than significant.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Change from Previous Analysis: The project conforms to the IBC Vision Plan, which has been developed to facilitate the continued evolution of the IBC from solely office, industrial, and commercial uses into a fully mixed-use business and residential community. The IBC Vision Plan, adopted as Element N of the City's General Plan, represents policy direction to create a neighborhood framework for the IBC, while the overlay zone and related code amendments created development standards for new residential and mixed-use development to ensure proper integration of these uses into the planned neighborhood framework. More specifically, the project conforms to Chapter 9-36 of the Zoning Ordinance, which allows for a maximum of 15,000 residential base units within the IBC plus up to 2,038 density bonus units as an incentive for projects that provide affordable housing. Therefore, similar to the findings of the IBC EIR, impacts associated with land use plans, policies, and regulations would be less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Change from Previous Analysis: The IBC EIR found that there would be no impacts to either habitat conservation or natural community plans. While the IBC is located in the Orange County's Central and Coastal NCCP/HCP, as addressed in Section 6.4, *Biological Resources*, above, the project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. Thus, although located within the boundary of the NCCP/HCP, the project

would not affect any plant or wildlife species, or habitat, protected under the plan. Therefore, similar to the findings of the IBC EIR, no impacts associated with habitat conservation or natural community plans would occur.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater land use and planning impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.11 Mineral Resources

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to mineral resources.

Discussion of the Proposed Project

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

and

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Change from Previous Analysis [a) and b)]: There are no known mineral resources or mineral resource recovery sites on or adjacent to the project site. Therefore, similar to the findings of the IBC EIR, no impacts associated with mineral resources or mineral recovery sites would occur.

Level of Significance of the Project After Mitigation

No Change from Previous Analysis: No new or substantially greater impacts on mineral resources would result from the IBC, as modified with the proposed project, would occur. No mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.12 Noise

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to:

- Stationary-source noise generated by land uses within the IBC would comply with Municipal Code standards and would not substantially elevate the ambient noise environment.

- Noise-sensitive habitable rooms in structures within the 60 dBA CNEL noise contour of JWA would be exposed to substantial levels of airport-related noise. PDF-4 prohibits residential and active recreational areas in the 65 dBA CNEL of John Wayne Airport, and requires preparation of an acoustical analysis identifying required building acoustical improvements for any project within the airport 65 dBA CNEL.

However, the IBC EIR identified that the IBC project could result in significant and unavoidable impacts related to:

- Construction activities could result in temporary noise increases in the IBC and the surrounding area. IBC PPP 9-1, Control of Construction Hours, and PDF 9-2, specifying measures to separate noise sources and sensitive receptors during construction, were identified.

- Construction vibration could be perceptible at adjacent sensitive receptors. IBC PDF 9-1 requires noise vibration analysis and vibration reduction measures for individual projects that involve vibration-intensive construction activities. Also refer to PPP 9-1 and PDF 9-2.

- Project-related vehicle trips would substantially increase ambient noise at sensitive receptors on a segment of McGaw Avenue, and cumulatively on segments of Valencia Avenue, Warner Avenue, McGaw Avenue, and Birch Street.

- Sensitive receptors could be exposed to noise levels that exceed 65 dBA CNEL from transportation or stationary sources. PPP 9-2 requires a final acoustical report demonstrating that development would be adequately sound attenuated with all mitigation measures and conditions incorporated. PDF-3 requires occupancy disclosure notices for units with patios and/or balconies that do not meet the 65 dBA CNEL.

Discussion of the Proposed Project

Would the project:

a) Expose people to, or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

No Change from Previous Analysis: The IBC EIR identified temporary noise increases from construction activities and impacts from traffic noise as potentially significant impacts. The

project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

b) Expose people to, or generate excessive groundborne vibration or groundborne noise levels?

No Change from Previous Analysis: The IBC EIR identified the perception of construction-related groundborne vibration at nearby sensitive receptors as a significant impact. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

c) Substantially and permanently increase ambient noise levels in the project vicinity above levels existing without the project?

No Change from Previous Analysis: The FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used in the IBC EIR to evaluate highway traffic-related noise conditions along roadway segments in the project area. Standard vehicle mix for Orange County roadways was used for traffic on these roadway segments. The modeled traffic noise levels represent the worst-case scenario, which assumes no shielding is provided between the traffic and the location where the noise contours are drawn. The traffic noise model results show that development-related traffic would have mostly small (2.0 dBA or less) noise level increases along roadway segments in the project vicinity for the future opening (2017) and cumulative (2035) year scenarios. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

d) Substantially, temporarily, or periodically increase ambient noise levels in the project vicinity above levels existing without the project?

No Change from Previous Analysis: The IBC EIR identified temporary noise increases from construction activities as a significant impact. Construction activities associated with the proposed project would elevate daytime noise levels in the vicinity of noise-sensitive receptors within the project area. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

e) If located within an airport land use plan, or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Change from Previous Analysis: The IBC EIR evaluated the impact of new development within the AELUP area overseen by the John Wayne Airport Authority, and includes development standards to reduce potential impacts from aircraft noise to a less than significant level. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

f) If located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Change from Previous Analysis: The project area is not within the vicinity of a private airstrip. Therefore, similar to the findings of the IBC EIR, no impacts associated with private airstrip noise would occur.

Level of Significance of the Project After Mitigation

No Change from Previous Analysis: No new or substantially greater noise impacts to the IBC, as modified with the proposed project, would occur. In addition, as the proposed project would provide air conditioning as a standard feature, traffic noise impacts would be reduce to less than significant and no additional mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.13 Population and Housing

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to population and housing.

Discussion of the Proposed Project

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

and

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Change from Previous Analysis [b) and c)]: The IBC EIR identified no existing housing to be demolished as part of implementation of the Vision Plan. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater population and housing impacts to the IBC, as modified with the proposed project, would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.14 Public Services

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to public services.

Discussion of the Proposed Project

Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

i) Fire protection?

No Change from Previous Analysis: The IBC EIR identified existing Orange County Fire Authority (OCFA) requirements that would mitigate impacts of implementation of the IBC Vision Plan to a less than significant level. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

ii) Police protection?

No Change from Previous Analysis: The IBC EIR identified existing City policies and code requirements that would mitigate impacts of implementation of the IBC Vision Plan to a less than significant level. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

iii) Schools?

No Change from Previous Analysis: The IBC EIR identified student generation for new residential development within the Irvine, Santa Ana, and Tustin Unified School Districts. Each district identified no significant impacts from implementation of the IBC Vision Plan. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

iv) Parks?

No Change from Previous Analysis: The IBC EIR identified existing City policies and code requirements that would mitigate impacts of implementation of the IBC Vision Plan to a less than significant level. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

v) Library Services?

No Change from Previous Analysis: The IBC EIR identified existing library service policies in the General Plan that would mitigate impacts of implementation of the IBC Vision Plan to a less than significant level. The project does not change land use assumptions from the IBC EIR so impacts remain unchanged.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater public services impacts to the IBC, as modified with the proposed project, would occur. No mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.15 Recreation

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to recreation.

Discussion of the Proposed Project

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

and

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Change from Previous Analysis [a) and b)]: No Change from Previous Analysis: The project does not change land use assumptions nor demand for recreational services from the IBC EIR so impacts remain unchanged.

Level of Significance of the Project After Mitigation

Less than Significant Impact: No new or substantially greater recreation impacts to the IBC, as modified with the proposed project, would occur. No mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the project.

5.16 Transportation and Traffic

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to:

- Change in air traffic patterns
- Hazardous design feature or incompatible uses
- Policies, plans, and programs for alternative transportation
- Adequacy of emergency access and parking capacity

However, the IBC EIR identified that the IBC project could result in significant and unavoidable impacts related to:

- Additional traffic volumes would be generated and would impact levels of service (LOS) for the existing local and regional roadway system.

Discussion of the Proposed Project

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact [a) and b)]: The project does not create a net increase in IBC circulation impacts when compared to the traffic analysis in the IBC EIR.

Overview

This 2015 Traffic Study Update analyzes the potential impacts on the circulation system based on updated conditions to the 2010 amendment to the City of Irvine General Plan that placed a 15,000 dwelling unit limit (plus a maximum of 2,038 density bonus units pursuant to state law) on the residential development in the IBC area. Based on approvals since 2010, the total number of density bonus units assumed for this update is reduced to 1,794 from 2,038. This reduction represents 2,038 assumed theoretical density bonus units in 2010 less 244 theoretical units removed due to reduction in units not associated with any planned project.

The analysis presents areas of deficiency in the existing circulation system and future circulation systems and offers recommended mitigations to allow for a return to acceptable

levels of service (LOS) or to the pre-Vision Plan condition within the study area. The analysis focuses on the identification of updated potential traffic impacts on the current circulation system as it is transformed into a mixed-use community from its previous offerings of office, commercial, and industrial uses within the IBC area. This traffic study provides an assessment of the existing conditions in 2015, existing conditions with the updated Vision Plan assumptions, as well as future Interim Year (2020) and Buildout Year (post-2035) scenarios with and without the updated Vision Plan assumptions. A comparison of the impacted locations versus the impacted locations identified in the 2010 IBC Vision Plan Traffic Study is also performed.

To assess the impact of the land use changes since the implementation of the 2010 Vision Plan, a total of six scenarios were analyzed:

- Existing Conditions (using current traffic counts)
- Existing Conditions with updated assumptions of Vision Plan Buildout
- 2020 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- 2020 Cumulative Baseline plus updated Vision Plan assumptions anticipated to be constructed by 2020
- Post-2035 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- Post-2035 Cumulative Baseline with updated assumptions of Vision Plan Buildout

Table 1 shows the land use assumptions for each scenario

Table 1 – Land Use Assumptions

SCENARIO	MULTI-FAMILY RESIDENTIAL (DU)	RETAIL MIX (TSF)	HOTEL (ROOM)	OFFICE MIX (TSF)	INDUSTRIAL MIX (TSF)	MINI-WAREHOUSE (TSF)	EXTENDED STAY HOTEL (ROOM)
2015 Existing	7,060	1,384	2,322	26,639	13,934	379	474
2015 With Update	16,795	1,690	2,653	34,286	12,339	549	1049
2020 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
2020 Cumulative With Update	16,671	1,405	2,535	27,750	13,240	883	1049
Post-2035 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
Post-2035 Cumulative Baseline With Update	16,795	1,690	2,653	34,286	12,339	549	1049

Traffic Impacts & Fair Share

A number of agreements were signed between the City of Irvine and adjacent jurisdictions during the 2010 IBC Vision Plan effort which required the City of Irvine to provide specific dollar amounts of infrastructure funding to each adjacent jurisdiction. These agreements were premised on the understanding that the Vision Plan had no additional responsibilities toward improvements identified, provided the residential unit cap within the IBC is not exceeded.

The residential unit intensity cap has not increased since the 2010 IBC EIR Traffic Study. This 2015 Traffic Study Update is intended only to analyze the change in traffic conditions since the 2010 approval. Except as otherwise specified in those existing agreements with adjacent jurisdictions, the Vision Plan is not responsible for mitigating the improvements identified in this study update within the cities of Tustin, Newport Beach, Santa Ana, or for improvements on Caltrans facilities.

For the sole purpose of providing a reference point for comparison with the 2010 IBC EIR Traffic Study, a fair-share methodology was used to evaluate what the financial participation of mitigating IBC Vision impacts would be in the absence of the above-mentioned agreements. The following methodology is applied:

- For plan update impacts within the City of Irvine, the IBC Vision Plan is fully responsible.

- For plan update impacts outside the City of Irvine, the IBC Vision Plan would participate on a fair-share basis.

All impacts referenced in this study update represent impacts as defined in the City of Irvine's Traffic Impact Analysis (TIA) Guidelines, adopted August 2004, or for locations outside Irvine, per the performance criteria for each affected agency.

The cost of improvements will be presented in a supplemental nexus report. Under future forecast conditions there are a number of deficient intersections. **Table 2** demonstrates the deficiencies, impacts, and fair-shares under each future scenario.

Table 2 – Intersection/Arterial Segment Impacts/Cumulative Deficiencies

ID	INTERSECTION	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
85	MacArthur Boulevard at Birch Street	Newport Beach				X		5.6%	No Share
723	Main Street at Segerstrom Avenue	Santa Ana				X		40.3%	No Share
728	Halliday East at Alton Parkway	Santa Ana				X		7.2%	No Share
36	Red Hill Avenue at El Camino Real	Tustin		X			10.7%		No Share
445	Tustin Ranch Rd at Warner Ave N	Tustin				X		15.7%	No Share
93	Tustin Ranch Road at Bryan Avenue	Tustin	X		X		0.3%	9.9%	No Share
111	Franklin Avenue at Walnut Avenue	Tustin	X		X		3.9%	3.5%	No Share
749	Park Ave at A Street	Tustin			X			1.5%	No Share
98	Von Karman Avenue at Alton Pkwy	Irvine				X			100.0%
144	Jamboree Road at I-405 SB Ramps	Irvine				X			100.0%
145	Jamboree Road at Michelson Drive	Irvine				X			100.0%
188	Harvard Avenue at Michelson Drive	Irvine				X			100.0%
229	Culver Drive at Alton Parkway	Irvine				X			100.0%

ID	INTERSECTION	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
97	Von Karman Ave/Tustin Ranch Rd at Barranca Pkwy	Irvine				X			100.0%
234	Culver Drive at Michelson Drive	Irvine	X						No Share
135	Jamboree NB Ramps/Warner Ave	Irvine			X				100.0%
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	X		X				100.0%
1326	Dyer Rd between SR-55 SB and SR-55 NB	Santa Ana		X		X	15.9%	21.3%	No Share

*Fair-share percentage is shown for informational and comparison purposes only

Improvement Strategies

The 2015 Traffic Study Update proposes improvements for all intersections (and one impacted arterial segment) within the study area that are identified as impacts as well as all forecast cumulative deficiencies. Due to the above-mentioned agreements with adjacent cities and Caltrans (other than in the City of Costa Mesa), contribution towards improvements identified at locations where the update has an impact outside the City of Irvine are provided for reference only. Improvement strategies have utilized other studies in adjacent jurisdictions and have been vetted through site analyses to propose improvements that are feasible and reasonable. **Table 3** displays the mitigation strategies for each deficient intersection within the IBC study area.

Table 3– Improvement Strategies

INTER-SECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
2020 Impacts and Cumulative Deficiencies			
234	Culver Drive at Michelson Drive (cumulative deficiency)	Irvine	Improve EB to 2,2,0
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
36	Red Hill Avenue at El Camino Real (update impact)	Tustin	Reconfigure SB to 1.5,2.5,0**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th EBT**
P-2035 Impacts and Cumulative Deficiencies			
98	Von Karman Avenue at Alton Parkway (impact)	Irvine	Add 3rd NBT
135	Jamboree NB Ramps/Warner Avenue (cumulative deficiency)	Irvine	Restripe EB to 2,2,0
144	Jamboree Road at I-405 SB Ramps (impact)	Irvine	Improve EB to 2.5,0,2.5
145	Jamboree Road at Michelson Drive (impact)	Irvine	Add 3rd EBL, 3rd SBL, and WBT***
188	Harvard Avenue at Michelson Drive (impact)	Irvine	Improve SB to 2,2,0
229	Culver Drive at Alton Parkway (impact)	Irvine	Improve EB to 2,3,0
97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway (impact)	Irvine	Add 3rd NBT and convert De Facto to Standard NBR
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
85	MacArthur Boulevard at Birch Street (impact)	Newport Beach	Improve EB to 2 EBL and 2 EBT**

INTER-SECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
723	Main Street at Segerstrom Avenue (impact)	Santa Ana	Add 3rd NBT, De Facto NBR**
728	Halladay East at Alton Parkway (impact)	Santa Ana	Add 2nd EBT and 2nd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th WBT**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
445	Tustin Ranch Road at Warner Avenue North (impact)	Tustin	Improve NB to 0,2.5,1.5**
749	Park Ave at A Street (cumulative deficiency)	Tustin	Add 2nd SBL and 2nd WBL**

* Arterial Segment

** Improvement strategy provided for information and planning purposes only.

*** Alternative improvement strategy is implementation of the Jamboree/Michelson pedestrian bridge across Jamboree.

Comparison of Impacts to 2010 Traffic Study

Table 4 shows the net overall result of fewer future impacts compared to the 2010 IBC EIR Traffic Study. The number of interim year forecast impacts reduce from 13 to 10. The number of Buildout year forecast impacts reduces from 41 to 22. Additional details are provided in **Chapter 8.**

Table 4 - Comparison of Number of Impacted Locations between 2010 IBC Traffic Study and 2015 Traffic Study Update

	Interim Year		Buildout Year	
Facility Type	**2010 Study**	**2015 Update**	**2010 Study**	**2015 Update**
Arterial Segments	0	1	1	1
Intersections	4	1	15	10
Freeway Mainline	4	6	14	5
Freeway Ramps	5	2	11	6
Total	13	10	41	22

In the 2010 IBC EIR Traffic Study the Interim year was 2015 and Buildout year was Post-2030 whereas in the current update study, the Interim year is 2020 and the Buildout year is Post-2035.

Arterial System Deficiencies

Individual arterial segments that operate at a deficient LOS under daily conditions within the City of Irvine are candidates for peak hour analysis to determine performance during the AM and PM peak hour. The peak hour analysis conducted for each of the forecast future scenarios revealed no arterial segments operating at a deficient level in either peak hour within the City of Irvine. For arterial segments within the Cities of Newport Beach, Costa Mesa, and Tustin, daily arterial segment LOS analysis is valuable for long-range planning purposes but the Cities do not assess segment deficiencies under daily conditions. Deficiencies are assessed at intersections at either end of the arterial segment. Intersection deficiencies for the IBC Vision have been assessed and conclusions discussed in the next section. Hence, there are no deficiencies or impacts expected in future forecast scenarios for arterial segments within Newport Beach, Costa Mesa, and Tustin.

In the City of Santa Ana, daily arterial volume-to-capacity ratio (V/C) analysis is used to assess deficiencies in the arterial network. An increase of 0.01 or more of the daily V/C ratio constitutes an impact when compared with the Baseline conditions. There were no impacted arterial segments in the interim year in the 2010 IBC EIR Traffic Study within the City of Santa Ana while one arterial segment is impacted in the 2015 Traffic Study Update in the Interim year:

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

In the Buildout year in the 2010 IBC EIR Study one arterial location was impacted:

- MacArthur Boulevard between Main Street and SR-55 SB in the City of Santa Ana

This MacArthur Boulevard widening no longer appears to be needed as forecast volumes drop from 51,000 ADT to 39,000 ADT in the 2015 Traffic Study Update. In the Buildout conditions of the 2015 Traffic Study Update one arterial location was impacted (also impacted in 2020):

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

Intersection Deficiencies and Impacts

Analysis of the intersections was conducted for all intersections within the defined IBC Vision Plan study area. For each jurisdiction, the established and published criteria for evaluating impacts have been employed in this study. Plan update impacts are identified for the study area using the methodology for each respective jurisdiction. **Table 5** compares the impacted intersections in both traffic studies for the Interim year. In the 2010 IBC EIR Traffic Study, four intersections were impacted whereas in the 2015 Traffic Study Update only one intersection is impacted.

Table 5 – Intersection Impacts - Interim Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
145	Jamboree Rd at Michelson Dr	Irvine	PM	x		
234	Culver Drive at Michelson Drive	Irvine	PM			x*
62	Campus Dr at Bristol Street NB	Newport Beach	PM	x		
93	Tustin Ranch Rd at El Camino Real	Tustin	AM	x		
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	PM	x		x*
36	Red Hill Ave at El Camino Real	Tustin	PM			x
* Irvine cumulative deficiency			Sum	4	0	1
			Total Impacts (2010 Study)	4	Total Impacts (2015 Update)	1

Table 6 shows that while 15 intersections were impacted in Buildout in the 2010 IBC EIR Study only 10 are impacted in the 2015 Traffic Study Update build-out condition. The following three locations were impacted in both studies:

- # 85 - MacArthur Boulevard at Birch Street in Newport Beach
- #145 - Jamboree Road at Michelson Drive in Irvine
- #723 - Main Street at Segerstrom Avenue in Santa Ana

Two of the 2010 IBC EIR Study impacted locations #135 Jamboree Road at Barranca Parkway and #141 Jamboree Road at Main Street have programmed improvements that are expected to be completed by 2020. As noted previously these improvements have been incorporated into analysis which results in a satisfactory level of service and no impacts under all scenarios studied in the 2015 Traffic Study Update.

Table 6 – Intersection Impacts - Buildout Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

INT ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY 2015 UPDATE	2015 UPDATE ONLY
12	SR-55 Frontage Road SB at Baker Street	Costa Mesa	AM	x		
13	SR-55 Frontage Road NB at Baker Street	Costa Mesa	AM	x		
62	Campus Drive at Bristol Street NB	Newport Beach	PM	x		
85	MacArthur Boulevard at Birch Street	Newport Beach	PM(both)		x	
543	Bristol at Segerstrom	Santa Ana	PM	x		
723	Main Street at Segerstrom Avenue	Santa Ana	PM(both)		x	
728	Halladay East at Alton Parkway	Santa Ana	AM&PM			x
730	Grand Avenue at Warner Avenue	Santa Ana	PM	x		
754	Red Hill Avenue at Carnegie Avenue	Tustin/Santa Ana	PM	x		
24	Newport Avenue at Walnut Avenue	Tustin	AM	x		
93	Tustin Ranch Road at El Camino Real	Tustin	AM	x		
445	Tustin Ranch Road at Warner Avenue N	Tustin	PM			x
97	Von Karman/Tustin Ranch at Barranca	Irvine/Tustin	PM			x
98	Von Karman Avenue at Alton Parkway	Irvine	PM			x
134	Loop Road/Park Ave at Warner Avenue	Irvine/Tustin	PM	x		x**
135	Jamboree NB Ramps/Warner	Irvine	PM			x**
136	Jamboree Road at Barranca Parkway*	Irvine/Tustin	PM	x		
141	Jamboree Road at Main Street*	Irvine	PM	x		
144	Jamboree Road at I-405 SB Ramps	Irvine	AM			x
145	Jamboree Road at Michelson Drive	Irvine	PM(both)		x	
188	Harvard Avenue at Michelson Drive	Irvine	PM	x **		X
229	Culver Drive at Alton Parkway	Irvine	PM			x
232	Culver Drive at I-405 NB Ramps	Irvine	PM	x		
			Sum	12	3	7
			Total Impacts (2010 Study)	15	Total Impacts (2015 Update)	10

* Improvement currently programmed
** Irvine cumulative deficiency

The completion of the Tustin Ranch Road extension seems to have had an effect on the location of impacted intersections. Compared to the 2010 Study, traffic is drawn away from Red Hill Avenue and Jamboree Road onto Von Karman Avenue/Tustin Ranch Road. A noticeable progression of impacted and deficient intersections can be seen in the PM peak period as traffic heads north from the heart of the IBC using Von Karman Avenue that becomes Tustin Ranch Road and eventually accesses the Jamboree Road Expressway at the Warner Avenue Ramp. The progression of impacted/deficient intersections is:

- Von Karman Avenue at Alton Parkway (Irvine)
- Von Karman Avenue at Barranca Parkway (Irvine)
- Tustin Ranch Road at Warner Avenue North (Tustin)
- Loop Road/Park Avenue at Warner Avenue (Irvine/Tustin-Deficiency only)
- Jamboree Northbound Ramps at Warner Avenue (Irvine-Deficiency only)

Freeway Mainline and Ramps

Table 7 compares the Interim Year impacted freeway mainline segments in both traffic studies. In the 2010 IBC EIR Study four segments were impacted whereas in the 2015 Traffic Study Update six locations are impacted. Three of these locations all on I-405 between Jamboree Road and SR-55 are common in both studies.

Table 7 – Freeway Mainline Impacts - Interim Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	SB	PM		x	
I-5	North of SR-55	NB	AM			x
SR-55	Dyer Road to Edinger Avenue	NB	AM			x
SR-73	Campus Drive to SR-55	NB	AM			x
			Sum	1	3	3
			Total Impacts (2010 study)	4	Total Impacts (2015 Update)	6

Table 8 compares the Buildout year impacted freeway mainline segments in both traffic studies. In the 2010 IBC EIR Study fourteen segments were impacted whereas in the 2015 Traffic Study Update only five locations are impacted. Two of these locations are common in both studies.

Table 8 – Freeway Mainline Impacts - Buildout Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-5	Jamboree Road to Tustin Ranch Road	NB	AM	x		
I-5	Jamboree Road to Tustin Ranch Road	SB	AM&PM	x		
I-5	Newport Avenue to SR-55	NB	AM	x		
I-5	North of SR-55	SB	AM	x		
I-5	Red Hill Avenue to Newport Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	SB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	NB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	SB	AM&PM	x		
SR-55	MacArthur Boulevard to Dyer Road	NB	PM	x		
SR-55	MacArthur Boulevard to Dyer Road	SB	AM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		X	

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
SR-55	Dyer Road to Edinger Avenue	NB	PM		X	
I-405	MacArthur Boulevard to SR-55	NB	AM&PM			x
I-405	MacArthur Boulevard to SR-55	SB	AM&PM			x
SR-55	McFadden St/Sycamore Ave to I-5	NB	PM			x
			Sum	12	2	3
			Total Impacts (2010 Study)	14	Total Impacts (2015 Update)	5

Table.9 compares the Interim year impacted freeway ramps in both traffic studies. In the 2010 IBC EIR Study five ramps were impacted whereas in the 2015 Traffic Study Update only two locations are impacted. Both the 2015 Traffic Study Update ramps are on I-405 and were also impacts in the 2010 study.

Table 9 – Freeway Ramp Impacts - Interim Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road	NB Off	AM	x		
SR-55	Victoria Street	NB Direct On	AM	x		
SR-73	MacArthur Boulevard	NB On	AM	x		
I-405	Jamboree Road	SB Off	PM		x	
I-405	Bristol Street	SB Loop On	PM		x	
			Sum	3	2	0
			Total Impacts (2010 Study)	5	Total Impacts (2015 Update)	2

Table 10 compares the Buildout year impacted freeway ramps in both traffic studies. In the 2010 IBC EIR Study eleven ramps were impacted whereas in the 2015 Traffic Study Update only six ramps are impacted. Three of the ramps impacted in the 2015 Traffic Study Update ramps are on I-405 and were also impacts in the 2010 study.

Table 10 – Freeway Ramp Impacts - Buildout Year (2010 IBC EIR Study vs. 2015 Traffic Study Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Culver Drive	NB Off	AM	X		
I-405	MacArthur Boulevard	NB On	PM	X		
I-405	Jamboree Road	SB Off	AM/PM	X		
SR-55	Baker Street	NB Off	AM/PM	X		
SR-55	Baker Street	SB On	PM	X		
SR-55	MacArthur Boulevard	SB On Loop	PM	X		
SR-73	Campus Drive	NB On	PM	X		
SR-73	Jamboree Road	SB Off	AM/PM	X		
I-405	MacArthur Boulevard	NB Off	AM		X	
I-405	Bristol Street	SB Loop On	PM		X	
SR-55	Dyer Road	NB On Direct	PM		X	
I-405	Jamboree Road	NB Off	AM			X
SR-55	Dyer Road	NB Off	AM			X
SR-73	Campus Drive	SB Off	AM			X
			Sum	8	3	3
			Total Impacts (2010 Study)	11	Total Impacts (2015 Update)	6

MPAH and General Plan Amendment

The results of this Five-Year Update study indicate that no additional proposed changes are required to the City of Irvine General Plan or Countywide Master Plan of Arterial Highways (MPAH). Since the adoption of the 2010 Vision Plan, the City of Irvine General Plan has been amended with the following downgrades, per the 2010 Vision Plan:

- Barranca Pkwy between Red Hill Avenue and Jamboree Road (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Pkwy and McGaw Avenue (downgraded from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgraded from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Pkwy and Main Street (downgraded from an 8-lane divided roadway to a 6-lane roadway)
- Alton Avenue between Red Hill Avenue and Jamboree Road (downgraded from a 6-lane divided roadway to 4-lane divided roadway)*
- Von Karman Avenue between Barranca Pkwy and Michelson (downgraded from 6-lane roadway to 4-lane roadway)*

The arterial segments of Alton Pkwy between Red Hill Avenue and Jamboree Road and Von Karman Avenue between Barranca Pkwy and Michelson Drive as identified with an asterisk in the list above, were also programmed into the County's Master Plan of Arterial Highways (MPAH) since the 2010 Vision Plan approval.

Although the 2010 Vision Plan Traffic Study stated that it was the City's intention to remove the Von Karman Avenue at the I-405 freeway HOV drop ramps, it was determined that the improvement was of regional significance and therefore remains part of the Post-2035 build-out baseline assumptions.

Consistent with the 2010 Vision Plan, the widening of Red Hill Avenue from four lanes to six lanes between MacArthur Boulevard and Main Street is assumed in the Post-2035 Build-out Baseline since it is the one missing roadway widening in IBC that is needed to fulfill the County's Master Plan of Arterial Highways (MPAH).

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Change from Previous Analysis: The IBC EIR identified no impacts to air traffic patterns. The proposed project contains no features that would change this conclusion.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant: Project design features for new development were evaluated in the IBC EIR based on the City's Transportation Design Procedures (TDPs). As a result, no impacts to vehicle access were identified using the following design guidelines:

- TDP-1 (Turn-Lane Pocket Lengths)
- TDP-3 (Left-Turn In/Out Access)
- TDP-4 (Right-Turn Lanes at Uncontrolled Driveways)
- TDP-10 (Distance Between Driveways and Intersections)
- TDP-11 (Corner Clearance)
- TDP-14 (Driveway Lengths)
- TDP-15 (Gate Stacking)

Improvements identified by the Project are required to utilize these design guidelines, therefore, impacts from the Project would be less than significant.

e) Result in inadequate emergency access?

No Change from Previous Analysis: The IBC EIR requires all new development to comply with applicable IBC PPPs pertaining to fire, police, and medical emergency services and access. This includes compliance with: (1) all applicable OCFA codes, ordinances, and standard conditions regarding fire prevention and suppression measures, including fire access, access gates (PPP 11-1); (2) an executed Secured Fire Protection Agreement with the OCFA (City of Irvine Standard Condition) (PPP 11-2); (3) fire protection access easements approved by the OCFA and irrevocably dedicated in perpetuity to the City (City of Irvine Standard Condition) (PPP11-3); and (4) a "Click2Enter" radio frequency access system installed at vehicle and pedestrian access points controlled by privacy gates within the Project area (PPP 11-4). Thus, with implementation of these IBC PPPs, adequate emergency access would be provided on the development sites. Therefore, similar to the findings of the IBC EIR, no impacts associated with emergency access would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Change from Previous Analysis: The IBC EIR found that implementation of the IBC project would comply with adopted policies, plans, and programs for alternative transportation. Therefore, similar to the findings of the IBC EIR, no impacts associated with alternative transportation would occur.

Level of Significance of the Project After Mitigation

No Change from Previous Analysis: No new or substantially greater transportation and traffic impacts to the IBC- as evaluated in the IBC EIR and as modified with the proposed Project- would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

Changes to Mitigation Measure 13-1: As noted in Section 1, this Addendum makes minor changes to Mitigation Measure 13-1. As approved in 2010, Mitigation Measure 13-1 required an initial traffic study for the traffic improvements at the fifteen intersections listed above in Section 1.3. As drafted, the mitigation measure does not contemplate and potentially constrains the scope of updated traffic studies that are required by Section 9-36-14(K) of the Irvine Zoning Ordinance. While Mitigation Measure 13-1 was effective for the initial traffic study, it's lack of flexibility could render it less effective for subsequent traffic studies. This Addendum updates Mitigation Measure 13-1 to allow for subsequent traffic studies in accordance with the Irvine Zoning Ordinance. The changes to Mitigation Measure 13-1 are set forth below with new language underlined. No other PPPs, PDFs, or MMs of the IBC EIR would be applicable to the Project.

Revised Mitigation Measure 13-1

Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall prepare a "nexus" study that will initially serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq, for the Irvine Business Complex to support General Plan and Zoning changes under consideration for the Irvine Business Complex Vision Plan. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. The following traffic improvements and facilities are necessary to mitigate project impacts and shall be included, among other improvements, in the original AB 1600 nexus study adopted in 2011:

Costa Mesa

- Intersection #12: SR-55 Southbound Frontage Road at Baker Street
    - Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane. Restripe the eastbound approach to two through lanes and a shared through right turn lane.

- Intersection #13: SR-55 Northbound Frontage Road at Baker Street
    - Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound defacto right turn lane.

Irvine

- Intersection #141: Jamboree Road and Main Street
    - Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane.

- Intersection #188: Harvard Avenue and Michelson Drive
    - Add a second southbound left turn lane.
- Intersection #232: Culver Drive and I-405 Northbound Ramps
    - Restripe the westbound approach of this intersection to one left turn lane, one right turn lane, and a shared left-right turn lane.

- Intersection #136: Jamboree Road and Barranca Parkway
    - Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane.

Newport Beach

- Intersection #62: Campus Drive at Bristol Street NB
    - In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport. The City shall coordinate with Newport Beach and JWA to determine the timing and funding availability for this improvement.

- Intersection #85: MacArthur Boulevard and Birch Street
    - Improve the eastbound approach to two eastbound left-turn lanes and two southbound through lanes.

Santa Ana

- Intersection #543 Bristol Street and Segerstrom Avenue
    - Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of Santa Ana to determine the most appropriate future improvement at this location.
        - Alternative 1: Add 3rd eastbound through and westbound through lanes on Segerstrom Avenue.
        - Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street.

- Intersection #723 Main Street and Dyer Road (Segerstrom)
    - Add a third northbound through lane and a defacto northbound right-turn lane.

- Intersection #730 Grand Avenue and Warner Avenue
    - Add a third westbound through lane.

Tustin

- Intersection #24: Newport Avenue and Walnut Avenue
    - Add a defacto westbound right turn lane and defacto northbound right turn lane.

- Intersection #93: Tustin Ranch Road and El Camino Real
    - Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane.

- Intersection #134: Loop Road/Park Avenue at Warner Avenue
    - Add a third eastbound through lane.

- Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street
    - This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.

Following adoption of the initial 2011 AB 1600 nexus study, the City shall periodically undertake an updated comprehensive AB 1600 nexus study for the IBC to evaluate the implementation of the original and subsequently adopted AB 1600 nexus studies and update mitigation as needed. Subsequent AB 1600 nexus studies for the IBC shall be performed in accordance with Section 9-36-14(K) of the Irvine Zoning Ordinance, as amended from time to time.

5.17 Utilities and Service Systems

Summary of the IBC EIR Findings

The IBC EIR identified that development in accordance with the IBC Vision Plan would result in either less than significant or no impacts related to utilities and service systems.

Discussion of the Proposed Project

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Change from Previous Analysis: The Project does not change land use assumptions or utility needs from the IBC EIR so impacts remain unchanged.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

and

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

and

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water Treatment Facilities and Supply

No Change from Previous Analysis: The Project does not change land use assumptions or utility needs from the IBC EIR so impacts remain unchanged.

Wastewater Treatment Facilities and Capacity

No Change from Previous Analysis: The Project does not change land use assumptions or utility needs from the IBC EIR so impacts remain unchanged.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Change from Previous Analysis: The Project does not change land use assumptions or utility needs from the IBC EIR so impacts remain unchanged.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

and

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Change from Previous Analysis: The Project does not change land use assumptions or landfill facility needs from the IBC EIR so impacts remain unchanged.

Level of Significance of the Project After Mitigation

No Change from Previous Analysis: No new or substantially greater transportation and traffic impacts to the IBC- as evaluated in the IBC EIR and as modified with the proposed Project- would occur. No new mitigation measures are required.

Applicable IBC EIR PPPs, PDFs, and/or MMs

No PPPs, PDFs, or MMs of the IBC EIR would be applicable to the Project.

6.0 DETERMINATION

The Project here, being the proposed 2015-17 IBC Traffic Improvement Fee Program Update and modifications to Mitigation Measure 13-1, modifies the prior IBC Traffic Improvement Fee Program analyzed in the IBC EIR. The 2015 Traffic Study Update, however, illustrates that while one mitigation measure must be modified to reflect current traffic conditions and ensure updated fee studies comply with the Irvine Zoning Ordinance, there are no new or more severe adverse environmental impacts or revisions requiring a subsequent EIR. In fact, the 2015 Traffic Study Update indicates that the change in traffic conditions will not cause new or more severe adverse environmental impacts or require major revisions to the project. This Addendum is thus the appropriate level of environmental review for this Project under CEQA. (CEQA Guidelines, § 15164(a).)

The 2015 Traffic Study Update analyzed the relevant change in traffic conditions by taking a "snapshot" of the current development activity today (as compared to the 2010 Vision Plan land use assumptions evaluated in the IBC EIR) and considering ambient regional growth to compare with the 2010 assumptions. In this way, the 2015 Traffic Study Update looks at new information because a number of real-world factors have changed between the original 2010 Vision Plan Study and Year 2015 Conditions that influence the traffic conditions and the number and location of impacts.

The updated study notes that the residential unit intensity cap has not increased since the 2010 study, and that there is a net overall result of fewer impacts compared to the 2010 Vision Plan Traffic Study. The impacts for the interim year forecast drop from 13 to 10, and for the buildout year forecast from 41 to 22. In addition, four intersections were impacted in the 2010 Traffic Study, whereas in the 2015 Traffic Study Update, only one intersection is impacted, and the number of intersections impacted in buildout fell from 15 to 10. The Project addresses deficient intersection through updated mitigation fees.

Additionally, the number of impacted freeway and other ramps dropped from 5 to 2, and 11 to 6, respectively, since 2010. Lastly, while there are some additional traffic impacts since 2010, there is no substantial evidence in the record that these increases will result in a more severe impact requiring major revisions necessitating a subsequent or supplemental EIR. For instance, four segments of the freeway mainline were impacted in the 2010 Traffic Study, whereas six locations are impacted under the 2015 Traffic Study Update. But during the buildout year, that number drops from 14 impacted segments in the 2010 Traffic Study to 5 locations impacted in the 2015 Traffic Study Update. The fact that the 2015 Traffic Study Update's results indicate that no additional proposed changes are required to the City's General Plan further supports the use of an addendum for the Project.

Based on the information and analysis contained in the addendum, and pursuant to Section 15162 of the California Code of Regulations, the City has determined that:

1. There are no substantial changes proposed in the Project that would require major revisions of the previous EIR because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

2. Substantial changes have not occurred with respect to the circumstances under which the Project is undertaken which would require major revisions of the previous EIR because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

3. There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, showing any of the following:

   A. The Project would have one or more significant effects not discussed in the previous EIR;

   B. Significant effects previously examined would be substantially more severe than shown in the previous EIR;

   C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure or alternative; and

   D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

Bill Jacobs Principal Planner	September 12, 2017
Name, Title	Date
	City of Irvine
Signature	For

7.0 REFERENCES

1. Irvine Business Complex Vision Plan 2015 Traffic Study Update, prepared by Iteris and HDR, January 13, 2016

2. 2015 Traffic Study Update to Irvine Business Complex Vision Plan Traffic Fee Nexus Study, prepared by HDR and Iteris, June 7, 2017

3. Irvine Business Complex Vision Plan and Mixed Use Overlay Zoning Ordinance Environmental Impact Report, Final EIR Executive Summary, July 2010

8.0 ORGANIZATIONS AND PERSONS CONSULTED

City of Irvine:

- Bill Jacobs, Principal Planner
- Kerwin Lau, Project Development Administrator
- Sun Sun Murillo, Supervising Transportation Analyst
- Lisa Thai, Senior Transportation Analyst

Appendix A

Irvine Business Complex Vision Plan 2015 Traffic Study Update (Executive Summary), prepared by Iteris and HDR, January 13, 2016

ES EXECUTIVE SUMMARY

ES.1.1 Introduction

This 2015 IBC Vision Plan Five-Year Traffic Study Update fulfills requirements of the City of Irvine Zoning Ordinance, which was updated as part of the 2010 IBC Vision Plan approval to require the City to re-evaluate traffic conditions (and traffic impact locations) by way of a five-year traffic study update (amended to every two years in October 2015). This five-year update evaluates potential traffic impact locations and documents how development actually occurred over the past five years to determine how close the Vision Plan assumptions were to forecasting this condition. The update takes a "snapshot" of the development activity today and considers ambient regional growth to compare with the 2010 assumptions. If as a result of actual development the original traffic impacts are altered or changed, the City has the ability to revise the list of traffic mitigations and IBC fees accordingly within the umbrella of the adopted Vision Plan.

This IBC Vision Plan Five-Year Traffic Study Update analyzes the potential impacts on the circulation system based on updated conditions to the 2010 amendment to the City of Irvine General Plan that placed a 15,000 dwelling unit limit (plus a maximum of 2,038 density bonus units pursuant to state law) on the residential development in the IBC area. Based on approvals since 2010, the total number of density bonus units assumed for this update is reduced to 1,794 from 2,038. This reduction represents 2,038 assumed theoretical density bonus units in 2010 less 244 theoretical units removed due to reduction in units not associated with any planned project.

The analysis presents areas of deficiency in the existing circulation system and future circulation systems and offers recommended mitigations to allow for a return to acceptable levels of service (LOS) or to the pre-Vision Plan condition within the study area. The analysis focuses on the identification of updated potential traffic impacts on the current circulation system as it is transformed into a mixed-use community from its previous offerings of office, commercial, and industrial uses within the IBC area. This traffic study provides an assessment of the existing conditions in 2015, existing conditions with the updated Vision Plan assumptions, as well as future Interim Year (2020) and Buildout Year (post-2035) scenarios with and without the updated Vision Plan assumptions. A comparison of the impacted locations versus the impacted locations identified in the 2010 IBC Vision Plan Traffic Study is also performed.

To assess the impact of the land use changes since the implementation of the 2010 Vision Plan, a total of six scenarios were analyzed:

- Existing Conditions (using current traffic counts)
- Existing Conditions with updated assumptions of Vision Plan Buildout
- 2020 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- 2020 Cumulative Baseline plus updated Vision Plan assumptions anticipated to be constructed by 2020
- Post-2035 Cumulative Baseline (existing land uses on the ground within IBC area; cumulative growth outside the IBC area)
- Post-2035 Cumulative Baseline with updated assumptions of Vision Plan Buildout

Table ES-1 shows the land use assumptions for each scenario

Table ES.1.1 – Land Use Assumptions

SCENARIO	MULTI-FAMILY RESIDENTIAL (DU)	RETAIL MIX (TSF)	HOTEL (ROOM)	OFFICE MIX (TSF)	INDUSTRIAL MIX (TSF)	MINI-WAREHOUSE (TSF)	EXTENDED STAY HOTEL (ROOM)
2015 Existing	7,060	1,384	2,322	26,639	13,934	379	474
2015 With Update	16,795	1,690	2,653	34,286	12,339	549	1049
2020 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
2020 Cumulative With Update	16,671	1,405	2,535	27,750	13,240	883	1049
Post-2035 Cumulative Baseline	7,060	1,384	2,322	26,639	13,934	379	474
Post-2035 Cumulative Baseline With Update	16,795	1,690	2,653	34,286	12,339	549	1049

ES.1.2 Traffic Impacts & Fair Share

A number of agreements were signed between the City of Irvine and adjacent jurisdictions during the 2010 IBC Vision Plan effort which required the City of Irvine to provide specific dollar amounts of infrastructure funding to each adjacent jurisdiction. These agreements were premised on the understanding that the Vision Plan had no additional responsibilities toward improvements identified, provided the residential unit cap within the IBC is not exceeded. These agreements are included in **Appendix A**.

The residential unit intensity cap has not increased since the 2010 study. This traffic study update is intended only to analyze the change in traffic conditions since the 2010 approval. Except as otherwise specified in those existing agreements with adjacent jurisdictions, the Vision Plan is not responsible for mitigating the improvements identified in this study update within the cities of Tustin, Newport Beach, Santa Ana, or for improvements on Caltrans facilities.

For the sole purpose of providing a reference point for comparison with the 2010 study, a fair-share methodology was used to evaluate what the financial participation of mitigating IBC Vision impacts would be in the absence of the above-mentioned agreements. The following methodology is applied:

- For plan update impacts within the City of Irvine, the IBC Vision Plan is fully responsible.
- For plan update impacts outside the City of Irvine, the IBC Vision Plan would participate on a fair-share basis.

All impacts referenced in this study update represent impacts as defined in the City of Irvine's Traffic Impact Analysis (TIA) Guidelines, adopted August 2004, or for locations outside Irvine, per the performance criteria for each affected agency.

The cost of improvements will be presented in a supplemental nexus report. Under future forecast conditions there are a number of deficient intersections. **Table ES 1.2** demonstrates the deficiencies, impacts, and fair-shares under each future scenario.

Table ES 1.2 – Intersection/Arterial Segment Impacts/Cumulative Deficiencies

ID	INTERSECTION	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
85	MacArthur Boulevard at Birch Street	Newport Beach				X		5.6%	No Share
723	Main Street at Segerstrom Avenue	Santa Ana				X		40.3%	No Share
728	Halliday East at Alton Parkway	Santa Ana				X		7.2%	No Share
36	Red Hill Avenue at El Camino Real	Tustin		X			10.7%		No Share
445	Tustin Ranch Rd at Warner Ave N	Tustin				X		15.7%	No Share
93	Tustin Ranch Road at Bryan Avenue	Tustin	X		X		0.3%	9.9%	No Share
111	Franklin Avenue at Walnut Avenue	Tustin	X		X		3.9%	3.5%	No Share
749	Park Ave at A Street	Tustin			X			1.5%	No Share
98	Von Karman Avenue at Alton Pkwy	Irvine				X			100.0%
144	Jamboree Road at I-405 SB Ramps	Irvine				X			100.0%
145	Jamboree Road at Michelson Drive	Irvine				X			100.0%
188	Harvard Avenue at Michelson Drive	Irvine				X			100.0%
229	Culver Drive at Alton Parkway	Irvine				X			100.0%
97	Von Karman Ave/Tustin Ranch Rd at Barranca Pkwy	Irvine				X			100.0%
234	Culver Drive at Michelson Drive	Irvine	X						No Share
135	Jamboree NB Ramps/Warner Ave	Irvine			X				100.0%
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	X		X				100.0%
ID	ARTERIAL SEGMENT	JURISDICTION	IBC VISION WITH UPDATE (2020)		IBC VISION WITH UPDATE (POST-2035)		FAIR-SHARE		
			CUMULATIVE DEFICIENCY	IMPACT	CUMULATIVE DEFICIENCY	IMPACT	2020 WITH UPDATE*	POST-2035 WITH UPDATE*	EXPECTED SHARE (VISION PLAN)
1326	Dyer Rd between SR-55 SB and SR-55 NB	Santa Ana		X		X	15.9%	21.3%	No Share

*Fair-share percentage is shown for informational and comparison purposes only

ES.1.3 Improvement Strategies

The IBC Vision Plan Traffic Study Update proposes improvements for all intersections (and one impacted arterial segment) within the study area that are identified as impacts as well as all forecast cumulative deficiencies. Due to the above-mentioned agreements with adjacent cities and Caltrans (other than in the City of Costa Mesa), contribution towards improvements identified at locations where the update has an impact outside the City of Irvine are provided for reference only. Improvement strategies have utilized other studies in adjacent jurisdictions and have been vetted through site analyses to propose improvements that are feasible and reasonable. **Table ES 1.3** displays the mitigation strategies for each deficient intersection within the IBC study area.

Table ES.1.3– Improvement Strategies

INTERSECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
2020 Impacts and Cumulative Deficiencies			
234	Culver Drive at Michelson Drive (cumulative deficiency)	Irvine	Improve EB to 2,2,0
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
36	Red Hill Avenue at El Camino Real (update impact)	Tustin	Reconfigure SB to 1.5,2.5,0**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**

INTERSECTION ID #	INTERSECTION NAME	JURISDICTION	IMPROVEMENT STRATEGY
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th EBT**
P-2035 Impacts and Cumulative Deficiencies			
98	Von Karman Avenue at Alton Parkway (impact)	Irvine	Add 3rd NBT
135	Jamboree NB Ramps/Warner Avenue (cumulative deficiency)	Irvine	Restripe EB to 2,2,0
144	Jamboree Road at I-405 SB Ramps (impact)	Irvine	Improve EB to 2.5,0,2.5
145	Jamboree Road at Michelson Drive (impact)	Irvine	Add 3rd EBL, 3rd SBL, and WBT***
188	Harvard Avenue at Michelson Drive (impact)	Irvine	Improve SB to 2,2,0
229	Culver Drive at Alton Parkway (impact)	Irvine	Improve EB to 2,3,0
97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway (impact)	Irvine	Add 3rd NBT and convert De Facto to Standard NBR
134	Loop Road/Park Ave at Warner Avenue (cumulative deficiency)	Irvine/Tustin	Add 3rd EBT and NBR overlap
85	MacArthur Boulevard at Birch Street (impact)	Newport Beach	Improve EB to 2 EBL and 2 EBT**
723	Main Street at Segerstrom Avenue (impact)	Santa Ana	Add 3rd NBT, De Facto NBR**
728	Halladay East at Alton Parkway (impact)	Santa Ana	Add 2nd EBT and 2nd WBT**
1326*	Dyer Road between SR-55 SB and SR-55 NB (impact)	Santa Ana	Add 4th WBT**
93	Tustin Ranch Road at Bryan Avenue (cumulative deficiency)	Tustin	Add 4th SBT**
111	Franklin Avenue at Walnut Avenue (cumulative deficiency)	Tustin	Add 3rd WBT**
445	Tustin Ranch Road at Warner Avenue North (impact)	Tustin	Improve NB to 0,2.5,1.5**
749	Park Ave at A Street (cumulative deficiency)	Tustin	Add 2nd SBL and 2nd WBL**

* Arterial Segment

** Improvement strategy provided for information and planning purposes only.

*** Alternative improvement strategy is implementation of the Jamboree/Michelson pedestrian bridge across Jamboree.

ES 1.4 Comparison of Impacts to 2010 Traffic Study

Table ES 1.4 shows the net overall result of fewer future impacts compared to the 2010 Vision Plan Study. The number of interim year forecast impacts reduce from 13 to 10. The number of Buildout year forecast impacts reduces from 41 to 22. Additional details are provided in **Chapter 8.**

Table ES 1.4 - Comparison of Number of Impacted Locations between 2010 IBC Traffic Study and 2015 Update

	Interim Year		Buildout Year	
Facility Type	**2010 Study**	**2015 Update**	**2010 Study**	**2015 Update**
Arterial Segments	0	1	1	1
Intersections	4	1	15	10
Freeway Mainline	4	6	14	5
Freeway Ramps	5	2	11	6
Total	13	10	41	22

In the 2010 Traffic Study the Interim year was 2015 and Buildout year was Post-2030 whereas in the current update study, the Interim year is 2020 and the Buildout year is Post-2035.

ES 1.5 Arterial System Deficiencies

Individual arterial segments that operate at a deficient LOS under daily conditions within the City of Irvine are candidates for peak hour analysis to determine performance during the AM and PM peak hour. The peak hour analysis conducted for each of the forecast future scenarios revealed no arterial segments operating at a deficient level in either peak hour within the City of Irvine. For arterial segments within the Cities of Newport Beach, Costa Mesa, and Tustin, daily arterial segment LOS analysis is valuable for long-range planning purposes

but the Cities do not assess segment deficiencies under daily conditions. Deficiencies are assessed at intersections at either end of the arterial segment. Intersection deficiencies for the IBC Vision have been assessed and conclusions discussed in the next section. Hence, there are no deficiencies or impacts expected in future forecast scenarios for arterial segments within Newport Beach, Costa Mesa, and Tustin.

In the City of Santa Ana, daily arterial volume-to-capacity ratio (V/C) analysis is used to assess deficiencies in the arterial network. An increase of 0.01 or more of the daily V/C ratio constitutes an impact when compared with the Baseline conditions. There were no impacted arterial segments in the interim year in the 2010 Traffic Study within the City of Santa Ana while one arterial segment is impacted in the 2015 Update in the Interim year:

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

In the Buildout year in the 2010 Study one arterial location was impacted:

- MacArthur Boulevard between Main Street and SR-55 SB in the City of Santa Ana

This MacArthur Boulevard widening no longer appears to be needed as forecast volumes drop from 51,000 ADT to 39,000 ADT in the 2015 update. In the Buildout conditions of the 2015 update one arterial location was impacted (also impacted in 2020):

- Dyer Road between SR-55 NB ramps and SR-55 SB ramps

ES 1.6 Intersection Deficiencies and Impacts

Analysis of the intersections was conducted for all intersections within the defined IBC Vision study area. For each jurisdiction, the established and published criteria for evaluating impacts have been employed in this study. Plan update impacts are identified for the study area using the methodology for each respective jurisdiction.

Table ES-1.5 compares the impacted intersections in both traffic studies for the Interim year. In the 2010 study four intersections were impacted whereas in the 2015 Update only one intersection is impacted.

Table ES-1-5 – Intersection Impacts - Interim Year (2010 Study vs. 2015 Update)

ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
145	Jamboree Rd at Michelson Dr	Irvine	PM	x		
234	Culver Drive at Michelson Drive	Irvine	PM			x*
62	Campus Dr at Bristol Street NB	Newport Beach	PM	x		
93	Tustin Ranch Rd at El Camino Real	Tustin	AM	x		
134	Loop Rd/Park Ave at Warner Ave	Irvine/Tustin	PM	x		x*
36	Red Hill Ave at El Camino Real	Tustin	PM			x
* Irvine cumulative deficiency			Sum	4	0	1
			Total Impacts (2010 Study)	4	Total Impacts (2015 Update)	1

Table ES-1.6 shows that while 15 intersections were impacted in Buildout in the 2010 Study only 10 are impacted in the 2015 Update build-out condition. The following three locations were impacted in both studies:

- # 85 - MacArthur Boulevard at Birch Street in Newport Beach
- #145 - Jamboree Road at Michelson Drive in Irvine
- #723 - Main Street at Segerstrom Avenue in Santa Ana

Two of the 2010 Study impacted locations #135 Jamboree Road at Barranca Parkway and #141 Jamboree Road at Main Street have programmed improvements that are expected to be completed by 2020. As noted previously these improvements have been incorporated into analysis which results in a satisfactory level of service and no impacts under all scenarios studied in the 2015 Update.

Table ES-1.6 – Intersection Impacts - Buildout Year (2010 Study vs. 2015 Update)

INT ID	LOCATION	JURISDICTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
12	SR-55 Frontage Road SB at Baker Street	Costa Mesa	AM	x		
13	SR-55 Frontage Road NB at Baker Street	Costa Mesa	AM	x		
62	Campus Drive at Bristol Street NB	Newport Beach	PM	x		
85	MacArthur Boulevard at Birch Street	Newport Beach	PM(both)		x	
543	Bristol at Segerstrom	Santa Ana	PM	x		
723	Main Street at Segerstrom Avenue	Santa Ana	PM(both)		x	
728	Halladay East at Alton Parkway	Santa Ana	AM&PM			x
730	Grand Avenue at Warner Avenue	Santa Ana	PM	x		
754	Red Hill Avenue at Carnegie Avenue	Tustin/Santa Ana	PM	x		
24	Newport Avenue at Walnut Avenue	Tustin	AM	x		
93	Tustin Ranch Road at El Camino Real	Tustin	AM	x		
445	Tustin Ranch Road at Warner Avenue N	Tustin	PM			x
97	Von Karman Ave/Tustin Ranch Rd at Barranca Pkwy	Irvine/Tustin	PM			x
98	Von Karman Avenue at Alton Parkway	Irvine	PM			x
134	Loop Road/Park Ave at Warner Avenue	Irvine/Tustin	PM	x		x**
135	Jamboree NB Ramps/Warner	Irvine	PM			x**
136	Jamboree Road at Barranca Parkway*	Irvine/Tustin	PM	x		
141	Jamboree Road at Main Street*	Irvine	PM	x		
144	Jamboree Road at I-405 SB Ramps	Irvine	AM			x
145	Jamboree Road at Michelson Drive	Irvine	PM(both)		x	
188	Harvard Avenue at Michelson Drive	Irvine	PM	x **		x
229	Culver Drive at Alton Parkway	Irvine	PM			x
232	Culver Drive at I-405 NB Ramps	Irvine	PM	x		
			Sum	12	3	7
			Total Impacts (2010 Study)	15	Total Impacts (2015 Update)	10

* Improvement currently programmed
** Irvine cumulative deficiency

The completion of the Tustin Ranch Road extension seems to have had an effect on the location of impacted intersections. Compared to the 2010 Study, traffic is drawn away from Red Hill Avenue and Jamboree Road onto Von Karman Avenue/Tustin Ranch Road. A noticeable progression of impacted and deficient intersections can be seen in the PM peak period as traffic heads north from the heart of the IBC using Von Karman Avenue that becomes Tustin Ranch Road and eventually accesses the Jamboree Road Expressway at the Warner Avenue Ramp. The progression of impacted/deficient intersections is:

- Von Karman Avenue at Alton Parkway (Irvine)
- Von Karman Avenue at Barranca Parkway (Irvine)

- Tustin Ranch Road at Warner Avenue North (Tustin)
- Loop Road/Park Avenue at Warner Avenue (Irvine/Tustin-Deficiency only)
- Jamboree Northbound Ramps at Warner Avenue (Irvine-Deficiency only)

ES.1.7 Freeway Mainline and Ramps

Table ES-1.7 compares the Interim Year impacted freeway mainline segments in both traffic studies. In the 2010 study four segments were impacted whereas in the 2015 Update six locations are impacted. Three of these locations all on I-405 between Jamboree Road and SR-55 are common in both studies.

Table ES-1.7 – Freeway Mainline Impacts - Interim Year (2010 Study vs. 2015 Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	NB	AM		x	
I-405	MacArthur Boulevard to SR-55	SB	PM		x	
I-5	North of SR-55	NB	AM			x
SR-55	Dyer Road to Edinger Avenue	NB	AM			x
SR-73	Campus Drive to SR-55	NB	AM			x
			Sum	1	3	3
			Total Impacts (2010 study)	4	Total Impacts (2015 Update)	6

Table ES-1.8 compares the Buildout year impacted freeway mainline segments in both traffic studies. In the 2010 study fourteen segments were impacted whereas in the 2015 Update only five locations are impacted. Two of these locations are common in both studies.

Table ES-1.8 – Freeway Mainline Impacts - Buildout Year (2010 Study vs. 2015 Update)

FREEWAY	SEGMENT	DIRECTION	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road to MacArthur Boulevard	SB	PM	x		
I-5	Jamboree Road to Tustin Ranch Road	NB	AM	x		
I-5	Jamboree Road to Tustin Ranch Road	SB	AM&PM	x		
I-5	Newport Avenue to SR-55	NB	AM	x		
I-5	North of SR-55	SB	AM	x		
I-5	Red Hill Avenue to Newport Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	NB	AM	x		
I-5	Tustin Ranch Road to Red Hill Avenue	SB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	NB	AM&PM	x		
SR-55	I-405 to MacArthur Boulevard	SB	AM&PM	x		
SR-55	MacArthur Boulevard to Dyer Road	NB	PM	x		
SR-55	MacArthur Boulevard to Dyer Road	SB	AM	x		
I-405	Jamboree Road to MacArthur Boulevard	NB	AM		x	
SR-55	Dyer Road to Edinger Avenue	NB	PM		x	
I-405	MacArthur Boulevard to SR-55	NB	AM&PM			x
I-405	MacArthur Boulevard to SR-55	SB	AM&PM			x
SR-55	McFadden St/Sycamore Ave to I-5	NB	PM			x
			Sum	12	2	3
			Total Impacts (2010 Study)	14	Total Impacts (2015 Update)	5

Table ES-1.9 compares the Interim year impacted freeway ramps in both traffic studies. In the 2010 study five ramps were impacted whereas in the 2015 Update only two locations are impacted. Both the 2015 Update ramps are on I-405 and were also impacts in the 2010 study.

Table ES-1.9 – Freeway Ramp Impacts - Interim Year (2010 Study vs. 2015 Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Jamboree Road	NB Off	AM	x		
SR-55	Victoria Street	NB Direct On	AM	x		
SR-73	MacArthur Boulevard	NB On	AM	x		
I-405	Jamboree Road	SB Off	PM		x	
I-405	Bristol Street	SB Loop On	PM		x	
			Sum	3	2	0
			Total Impacts (2010 Study)	5	Total Impacts (2015 Update)	2

Table ES-1.10 compares the Buildout year impacted freeway ramps in both traffic studies. In the 2010 study eleven ramps were impacted whereas in the 2015 Update only six ramps are impacted. Three of the ramps impacted in the 2015 Update ramps are on I-405 and were also impacts in the 2010 study.

Table ES-1.10 – Freeway Ramp Impacts - Buildout Year (2010 Study vs. 2015 Update)

FREEWAY	LOCATION	RAMP	PERIOD	2010 STUDY ONLY	2010 STUDY & 2015 UPDATE	2015 UPDATE ONLY
I-405	Culver Drive	NB Off	AM	X		
I-405	MacArthur Boulevard	NB On	PM	X		
I-405	Jamboree Road	SB Off	AM/PM	X		
SR-55	Baker Street	NB Off	AM/PM	X		
SR-55	Baker Street	SB On	PM	X		
SR-55	MacArthur Boulevard	SB On Loop	PM	X		
SR-73	Campus Drive	NB On	PM	X		
SR-73	Jamboree Road	SB Off	AM/PM	X		
I-405	MacArthur Boulevard	NB Off	AM		X	
I-405	Bristol Street	SB Loop On	PM		X	
SR-55	Dyer Road	NB On Direct	PM		X	
I-405	Jamboree Road	NB Off	AM			X
SR-55	Dyer Road	NB Off	AM			X
SR-73	Campus Drive	SB Off	AM			X
			Sum	8	3	3
			Total Impacts (2010 Study)	11	Total Impacts (2015 Update)	6

ES.1.8 MPAH and General Plan Amendment

The results of this Five-Year Update study indicate that no additional proposed changes are required to the City of Irvine General Plan or Countywide Master Plan of Arterial Highways (MPAH). Since the adoption of the 2010 Vision Plan, the City of Irvine General Plan has been amended with the following downgrades, per the 2010 Vision Plan:

- Barranca Pkwy between Red Hill Avenue and Jamboree Road (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Pkwy and McGaw Avenue (downgraded from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgraded from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgraded from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Pkwy and Main Street (downgraded from an 8-lane divided roadway to a 6-lane roadway)
- Alton Avenue between Red Hill Avenue and Jamboree Road (downgraded from a 6-lane divided roadway to 4-lane divided roadway)*
- Von Karman Avenue between Barranca Pkwy and Michelson (downgraded from 6-lane roadway to 4-lane roadway)*

The arterial segments of Alton Pkwy between Red Hill Avenue and Jamboree Road and Von Karman Avenue between Barranca Pkwy and Michelson Drive as identified with an asterisk in the list above, were also programmed into the County's Master Plan of Arterial Highways (MPAH) since the 2010 Vision Plan approval.

Although the 2010 Vision Plan Traffic Study stated that it was the City's intention to remove the Von Karman Avenue at the I-405 freeway HOV drop ramps, it was determined that the improvement was of regional significance and therefore remains part of the Post-2035 build-out baseline assumptions.

Consistent with the 2010 Vision Plan, the widening of Red Hill Avenue from four lanes to six lanes between MacArthur Boulevard and Main Street is assumed in the Post-2035 Build-out Baseline since it is the one missing roadway widening in IBC that is needed to fulfill the County's Master Plan of Arterial Highways (MPAH).

Appendix B

2015 Update to Irvine Business Complex Vision Plan
Traffic Fee Nexus Study,
prepared by HDR and Iteris,
June 7, 2017

2015 Update to:

Irvine Business Complex Vision Plan Traffic Fee Nexus Study



June 07, 2017

Prepared for:

J17-0530 | **Prepared by** HDR **Inc.** in association with iteris **Inc.**

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Executive Summary

This five-year update (2015 IBC Traffic Fee Nexus Update) is consistent with the principles of the Irvine Business Complex (IBC) Vision Plan and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to support that development. The objective of this study is to update development fees to financially support the implementation of identified improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the Vision Plan.

Pursuant to the requirements of AB 1600, this update ensures that it complies with the nexus determination requirement to:

- Identify the purpose of the fee;
- Identify the use to be funded by the fee;
- Determine the reasonable relationship between:
  - The use of the fee and the type of development paying the fee;
  - The need for the traffic improvements and the types of development on which the fee is imposed; and
  - The amount of the fee and the cost of the public facilities or portion of the public facilities (in this case, traffic improvements) attributable to the development.

The 2015 IBC Traffic Fee Nexus Study complies will all State legislative nexus requirements.

Table ES.1 summarizes the costs included in the 2015 IBC Traffic Fee Nexus Update. These costs are based on a combination of detailed cost estimates for specific fair-share improvements identified in the accompanying 2015 traffic study[1] (2015 IBC Traffic Study Update), obligations to fund specific improvements within adjacent jurisdictions as necessary to mitigate the impacts of the buildout of the IBC Vision Plan, and a continuing obligation to fund certain improvements identified in a prior fee program for the IBC adopted in 1992. Additionally, the costs include specific tasks required to implement and maintain the fee program consistent with the requirements of the IBC Vision Plan General Plan Amendment/Zoning Ordinance.

The proposed fee program assumes that development fees will fund up to 90% of identified improvement costs. It is assumed that the remaining 10% of the project costs will be covered by outside funding sources including federal, state, and county programs.

Table ES.2 summarizes a fee comparison between 1992 (at the onset of the IBC Fee Program), 2009 fees (developed through annual adjustments of the 1992 fee), 2010 fees (developed as part of the Vision Plan), 2016 fees (currently what the City charges developers – this is developed by applying annual adjustments to the 2010 fee) and proposed fees, effective beginning in the next FY 2017-18. Although the fees are significantly higher than the current 2016 fees, they still remain 31%-35% lower than 2009 fees.

[1] *Irvine Business Complex Vision Plan, 2015 Five Year Traffic Study Update, Iteris with HDR, 2016*

Table ES.1: 2015Updated IBC Vision Plan Traffic Fee Program Breakdown

Needs for IBC Vision Plan Traffic Improvements		
Improvement Costs		
Based on 2015 IBC Traffic Study Update		
Irvine (90% of estimate assumed)	*$18,006,327*	
Caltrans District 12	*$6,585,299*	
2015 IBC Traffic Study Update Improvements	$24,591,626	$24,591,626
Remaining Existing General Plan Improvements		
Irvine (90% of estimate assumed)	*$16,577,451*	
Improvements in Santa Ana	*$52,670,912*	
Improvements in Costa Mesa	*$28,970*	
2015 Update - Remaining Existing General Plan Improvements	$69,227,334	$69,227,334
Subtotal: 2015 Update IBC Vision Plan Improvement Cost		$93,868,960
Existing IBC Traffic Funds Available		
*Current IBC Traffic Fund Balance***	*$46,838,863*	
*Capital Improvement Program funds that are currently appropriated for IBC Improvements ****	*($27,354,385)*	
Subtotal: Existing IBC Funds to be applied to the 2015 Fee Program	($19,484,478)	($19,484,478)
Subtotal: (Effective) 2015 Updated IBC Vision Plan Improvement Cost		$74,384,482
Other IBC Vision Plan Traffic Fee Program Costs		
Transportation Management Systems (10% of total fee)	*$7,438,448*	
IBC Program Administration (5% of total fee)	*$3,719,224*	
Contingency (15% of total fee)	*$11,157,672*	
Subtotal: Additional Costs to the IBC Fee Program	$22,315,345	$22,315,345
Development Agreements (subject to fees identified in their agreements)		
Park Place DA	*($2,769,591)*	
Central Park West DA	*($1,233,998)*	
Subtotal: Existing Development Agreements	($4,003,589)	($4,003,589)
Subtotal: Total IBC Fees Required		$92,696,238

Source: HDR 2015 for Development of Improvement Costs; City of Irvine for Fund Balances
* Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
** Includes remaining balance from 1992 IBC Traffic Fee Program Fund Balance, current IBC Vision Plan Traffic Fee Program Fund Balance, and Caltrans subfund
*** CIP allocation for funding of Jamboree Road/Barranca Parkway and Jamboree Road/Main Street improvements, and partial funding for the pedestrian bridge at Jamboree Road and Michelson Drive

Table ES.2: IBC Fee Comparison

Land Use	Unit	IBC Traffic Fee					Increase from 2016 (factor)
		1992	2009	2010	2016	Proposed***	
Total Residential	DU	$3,734	$7,175	$1,862	$2,254	$4,697	2.08
Extended Stay	Rooms	$3,016	$5,795	$1,503	$1,820	$3,796	2.09
Hotel	Rooms	$4,883	$9,383	$2,435	$2,947	$6,140	2.08
Retail Mix	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Office	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Industrial Mix **	Sq. Ft.	$3.30	$5.85	$1.50	$1.82	$3.79	2.08
Mini Warehouse	Sq. Ft.	$1.85	$3.55	$0.97	$1.17	$2.44	2.09

Source: HDR 2015, City of Irvine
* Includes Density Bonus Units charged fees consistent with Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

The proposed fee is significantly higher than the 2010 fees and is attributable to the following factors:

- New improvement locations
- Significant increase in improvement costs between 2010 and 2015
- Fewer number of remaining development units (residential and non-residential) subject to fee
- Lesser remaining funds available from the IBC Traffic Fee Fund Balance, due to large payout to Cities of Newport Beach and Tustin (per 2009 and 2010 agreements respectively) and earmarked funds for improvements and payment to Caltrans (per 2011 agreement)

1 Introduction

1.1 Background

The City of Irvine established an Irvine Business Complex (IBC) Nexus Fee Program in 1992 (henceforth to be referred to as the 1992 Fee Program) to support the City's adoption of the more traffic intensive 1990 IBC Rezone General Plan Amendment (GPA) and Zone Code. The intent of the 1992 Fee Program was to support the implementation of specific improvements identified in a subsequent Environmental Impact Report (henceforth to be referred to as the 1992 EIR) prepared in conjunction with the 1992 rezoning actions. This approach is consistent with the City's General Plan Roadway Development Objective B-1 to "Plan, provide and maintain an integrated vehicular circulation system to accommodate projected local and regional needs."

In 2010, the City prepared the IBC Vision Plan (henceforth to be referred to as the Vision Plan), a GPA and Zone Change project to accommodate the ongoing shift in development patterns to improve the jobs-housing balance, and reduce vehicle miles travelled. In recent years, as development patterns within the IBC showed an increased demand for residential uses and a decreased demand for manufacturing and warehouse uses, The Vision Plan project, together with its accompanying EIR (Vision Plan EIR) were approved/certified by the Irvine City Council on July 13, 2010.

As part of the Vision Plan approval, the Zoning Ordinance was updated to require the City to re-evaluate traffic conditions (and traffic impact locations) and its impact on improvement needs, by way of a five-year traffic study update (amended to every two years in October 2015). In 2015, a five-year traffic study[2] (henceforth to be referred to as 2015 IBC Traffic Study Update) was completed to fulfil the requirements of the Zoning Ordinance. Based on the findings of the 2015 IBC Traffic Study Update, a new set of transportation improvements were identified. In this 2015 five-year fee/nexus update (henceforth to be referred to as 2015 IBC Traffic Fee Nexus Update), the fee structure and the nexus associated with the findings of the 2015 IBC Traffic Study Update, is being revised to accommodate the identified set of transportation improvements.

Subsequent to the completion of the Vision Plan, the City of Irvine entered into contractual agreements with the potentially affected jurisdictions/agencies (Caltrans District 12 and cities of Newport Beach, Santa Ana, Costa Mesa, and Tustin). Thus for this 2015 IBC Traffic Fee Nexus Update, only the fee associated with the findings of the 2015 IBC Traffic Study Update, were updated. The associated fair-shares and the nexus remained consistent with the 2010 Vision Plan Traffic Fee Nexus Study[3] (henceforth to be referred as Vision Plan Traffic Fee Nexus Study). This 2015 five-year update takes a "snapshot" of the development activity from the inception of the Vision Plan in 2010 to July 31, 2015, to evaluate the changes in land uses and traffic patterns, and subsequent improvement needs, resulting in the development of a proposed fee to be imposed effective fiscal year (FY) 2017-2018.

In 2010, the Vision Plan established two overlay zoning districts:

- Urban Neighborhood, in which residential mixed use was encouraged; and
- Business Complex, in which the existing allowable mix of non-residential uses was maintained.

The Vision Plan allowed for the buildout of 15,000 residential base dwelling units (DU) within the Urban Neighborhood Overlay Zone District, with a potential maximum of 2,038 additional density bonus units, pursuant to state law. In order to achieve the maximum residential development intensity contemplated under the Vision Plan, the Plan adopted a "flexible zoning" mechanism under which non-residential development intensity could be exchanged for residential development

[2] *Irvine Business Complex Vision Plan, 2015 Five Year Traffic Study Update, Iteris with HDR, 2016*

[3] *Irvine Business Complex Vision Plan Traffic Fee Nexus Study, Parsons Brinckerhoff, 2011*

intensity, thus achieving the maximum 15,000 DU (plus 2,038 DU pursuant to state law), by "offsetting" reduction of non-residential development intensity.

Based on approvals since 2010, the total number of density bonus units pursuant to state law assumed for this five-year update is reduced to 1,794 DU, down from the theoretical assumption of 2,038 DU in 2010. The accompanying 2015 IBC Traffic Study Update provided an assessment of existing, interim-year 2020 and buildout year Post-2035 with and without the updated land use conditions.

1.2 Purpose of the 2015 Update to the Vision Plan Nexus Study

Pursuant to requirements of the California Environmental Quality Act (CEQA), the City Council, as part of their approval of the Vision Plan in 2010, determined to make the City responsible to mitigate, where feasible, the impacts to the transportation system attributable to buildout of the Vision Plan. This 2015 IBC Traffic Fee Nexus Update is consistent with the principles of the Vision Plan Traffic Fee Nexus Study and maintains a consistent nexus between future development in the IBC and the transportation system improvements necessary to support that development. Through equitable developer fees, the objective of this update is to financially support the implementation of identified improvements to the transportation system within and adjacent to the IBC in order to accommodate full buildout of the Vision Plan.

California's Mitigation Fee Act (AB 1600, Cal. Gov. Code §§ 66000-66009) creates the legal framework for local governments to assess new fees toward future development. Such fees require new development to pay its fair-share of the infrastructure cost necessary to serve new residents and businesses. AB 1600 stipulates that a local government must take the following steps to establish a nexus between a proposed fee and project impacts:

- Identify the purpose of the fee;
- Identify the use to be funded by the fee;
- Determine the reasonable relationship between:
  - The use of the fee and the type of development paying the fee;
  - The need for the traffic improvements and the types of development on which the fee is imposed; and
  - The amount of the fee and the cost of the public facilities or portion of the public facilities (in this case, traffic improvements) attributable to the development.

These principles closely emulate two landmark US Supreme Court rulings that provide guidance on the application of impact fees. The first case, Nollan v. California Coastal Commission (1987) 107 S.Ct. 3141, established that local governments are not prohibited from imposing impact fees or dedications as conditions of project approval provided the local government establishes the existence of a "nexus" or link between the exaction and the interest being advanced by that exaction. The Nollan ruling clarifies that once the adverse impacts of development have been quantified, the local government must then document the relationship between the project and the need for the conditions that mitigate those impacts. The ruling further clarifies that an exaction may be imposed on a development even if the development project itself will not benefit provided the exaction is necessitated by the project's impacts on identifiable public resources.

The second case, Dolan v. City of Tigard (1994) 114 S.Ct. 2309, held that in addition to the Nollan standard of an essential nexus, there must be a "rough proportionality" between proposed exactions and the project impacts that the exactions are intended to provide benefit. As part of the Dolan ruling, the US Supreme Court advised that "a term such as "rough proportionality" best encapsulates what we hold to be the requirements of the Fifth Amendment. No precise mathematical calculation is required, but the city (or other local government) must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development."

The combined effect of both rulings resulted in the requirement that public exactions must be carefully documented and supported. This requirement was reiterated by the provisions of the State of California Mitigation Fee Act and subsequent rulings in the California Supreme Court (Ehrlich v. City of Culver City (1996) 12 C4th 854) and the California Court of Appeal (Loyola Marymount University v. Los Angeles Unified School District (1996) 45 Cal.App.4th 1256).

The Vision Plan Traffic Fee Nexus Study satisfied the requirements of the State of California Mitigation Fee Act. Thus this update is not intended to re-analyze the nexus or the purpose, but is to review and revise the fee program based on the needs determined by the 2015 IBC Traffic Study Update.

The 2015 IBC Traffic Study Update analyzed the project study area presented in Figure 1.1. All improvements identified under the interim year 2020 and buildout Post-2035 conditions are located within this defined project study area. Consistent with the methodology used in the 2010 IBC Vision Plan Traffic Study (henceforth referred to as Vision Plan Traffic Study), the 2015 IBC Traffic Study Update identified specific mitigation measure improvements that mitigate unacceptable level of service (LOS) E and F to acceptable LOS of A-D, per the City's Traffic Impact Analysis (TIA) Guidelines (adopted August 2004) and per the performance criteria for each affected agency (Caltrans District 12 and cities of Newport Beach, Costa Mesa, Santa Ana, and Tustin).

For locations within the City of Irvine, 90% of the improvement costs are included in the fee program. For locations not under the City of Irvine's jurisdiction, a fair-share methodology is applied that considers fair-shares of improvement costs. The proportionate fair-shares of improvement costs in the City of Costa Mesa and Santa Ana, associated with remaining improvements from the City of Irvine's Genera Plan, are included in the Fee Program. A 2011 amended agreement with the City of Santa Ana, replacing the 1992 agreement between the two cities, identified specific improvements for which the City of Irvine is either partially or fully responsible for certain improvement and those associated improvement costs were included in this update. In 2009 and 2010, respectively, the City of Newport Beach and the City of Tustin entered into settlement agreements with the City of Irvine, where City of Irvine made a one-time lump-sum payment to each of the cities, as its fair-share contribution towards transportation improvements and absolved itself from any future financial or implementation obligation related to the Vision Plan buildout.

Based on the findings from the 2015 IBC Traffic Study Update and existing agreements between the City of Irvine and the affected jurisdictions and agencies, Figure 1.1 identifies the improvement locations and provides a brief description of each improvement.

Costs of improvements included in the fee program are based on 2016 dollars developed from Construction Cost Index (CCI), and recent relevant projects unit cost estimates for construction materials and labor, and right-of-way cost estimates. This is further discussed in Section 2, IBC Vision Plan – 2015 Update Traffic Fee Program Cost. Section 3, Fee Methodology, walks the reader through a step by step process of developing the proposed fee effective FY 2017-2018. Section 4, Establishing Nexus discusses in details of the nexus between a proposed fee and project impacts, and Section 5, Conclusion summarizes the findings of this update and provides recommendations.

Figure 1.1: IBC Vision Plan – 2015 Update – Location of Improvements



Source: HDR 2015

2 IBC Vision Plan – 2015 Update to Traffic Fee Program Cost

The 2015 IBC Traffic Fee Nexus Update includes costs required to implement physical improvements that achieve the following:

- Mitigate impacts identified through the 2015 IBC Traffic Study Update;
- Satisfy agreements with adjacent jurisdictions that require the construction of specific roadway improvements to diminish the impacts of the Vision Plan development on the roadway system; and
- Upgrade the roadway network to be consistent with the buildout of the City's General Plan Circulation Element.

All costs included as part of the 2015 IBC Traffic Fee Nexus Update comply with the City's policies and estimates based on the most recent aerial photography available, field reviews for determination of feasibility, recent unit costs from local projects, and CCI updates. For all improvements located within the City of Irvine, 90% of total costs are included in this update. It is assumed that the remaining 10% will come from outside funding sources, such as federal, state and county grants.

Consistent with the Vision Plan Traffic Fee Nexus Study, this update includes costs related to the management and implementation of the IBC Vision Plan Traffic Fee Program. These costs include implementing Transportation Management Strategies (TMS) to reduce vehicle volumes and associated impacts, IBC Vision Plan Traffic Fee Program administration and construction contingency costs. Incorporated into the mix are the fund amounts that are currently available in the fee program, which includes specific amounts that are earmarked for projects identified in the City's Capital Improvement Program (CIP) and Development Agreements (DAs) that are not subject to any fee update.

Table 2.1 presents the fees required by the traffic fee program to implement the IBC Vision Plan.

2.1 Agreement with the City of Newport Beach

Following the development of the Vision Plan, the City of Irvine entered a settlement agreement with the City of Newport Beach. Based on this agreement, executed on November 24, 2009, the City of Irvine paid a one-time sum of $3,650,000 to the City of Newport Beach to be used exclusively for the engineering, design, and construction of Jamboree Corridor improvements and other traffic improvements located within the Vision Plan study area. Details of this agreement are presented in Appendix A. At the time of the agreement, the Cities of Irvine and Newport Beach agreed that the amount of $3,650,000 constituted a fair-share obligation for the City of Irvine toward improvements in Newport Beach necessitated by the development of the Vision Plan. The agreement was drawn up on the premise that the City of Irvine will not be financially responsible for any mitigation caused by the buildout of the Vision Plan, provided the residential unit cap of 15,000 DUs (plus 2,038 DUs pursuant to state law) is not exceeded. Therefore no mitigation improvement costs were identified within the City of Newport Beach for inclusion in this fee update.

Table 2.1: 2015Updated IBC Vision Plan Traffic Fee Program Breakdown

Needs for IBC Vision Plan Traffic Improvements		
Improvement Costs		
Based on 2015 IBC Traffic Study Update		
Irvine (90% of estimate assumed)	*$18,006,327*	
Caltrans District 12	*$6,585,299*	
2015 IBC Traffic Study Update Improvements	$24,591,626	$24,591,626
Remaining Existing General Plan Improvements		
Irvine (90% of estimate assumed)	*$16,577,451*	
Improvements in Santa Ana	*$52,670,912*	
Improvements in Costa Mesa	*$28,970*	
2015 Update - Remaining Existing General Plan Improvements	$69,227,334	$69,227,334
Subtotal: 2015 Update IBC Vision Plan Improvement Cost		$93,868,960
Existing IBC Traffic Funds Available		
*Current IBC Traffic Fund Balance***	*$46,838,863*	
*Capital Improvement Program funds that are currently appropriated for IBC Improvements ****	*($27,354,385)*	
Subtotal: Existing IBC Funds to be applied to the 2015 Fee Program	($19,484,478)	($19,484,478)
Subtotal: (Effective) 2015 Updated IBC Vision Plan Improvement Cost		$74,384,482
Other IBC Vision Plan Traffic Fee Program Costs		
Transportation Management Systems (10% of total fee)	*$7,438,448*	
IBC Program Administration (5% of total fee)	*$3,719,224*	
Contingency (15% of total fee)	*$11,157,672*	
Subtotal: Additional Costs to the IBC Fee Program	$22,315,345	$22,315,345
Development Agreements (subject to fees identified in their agreements)		
Park Place DA	*($2,769,591)*	
Central Park West DA	*($1,233,998)*	
Subtotal: Existing Development Agreements	($4,003,589)	($4,003,589)
Subtotal: Total IBC Fees Required		$92,696,238

Source: HDR 2015 for Development of Improvement Costs; City of Irvine for Fund Balances
* Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
** Includes remaining balance from 1992 IBC Traffic Fee Program Fund Balance, current IBC Vision Plan Traffic Fee Program Fund Balance, and Caltrans subfund
*** CIP allocation for funding of Jamboree Road/Barranca Parkway and Jamboree Road/Main Street improvements, and partial funding for the pedestrian bridge at Jamboree Road and Michelson Drive

2.2 Agreement with the City of Tustin

On July 13, 2010, following the development of the Vision Plan and through consultation with the City of Tustin, an agreement was executed between the Cities of Tustin and Irvine. The agreement stipulated that in lieu of City of

Irvine's fair-share of the estimated costs of traffic improvements located within the City of Tustin and identified as mitigation measures required for buildout of the Vision Plan, the City of Irvine would contribute 12% of the construction contract award amount or $4,500,000, whichever was greater, and up to a maximum of $6,500,000, for the Tustin Ranch Road extension roadway improvement between Walnut Avenue and Warner Avenue, including the grade separation and loop at Edinger Avenue. The improvements at Tustin Ranch Road, including the grade separation, were completed at the time of this update, however, the loop at Edinger Avenue is pending completion. Irvine's final contribution towards improvements in Tustin was $4.5 million. Appendix B presents the 2010 Settlement Agreement between the City of Irvine and the City of Tustin. The agreement was drawn up on the premise that the City of Irvine will not be financially responsible for any mitigation caused by the buildout of the Vision Plan, provided the residential unit cap of 15,000 DUs (plus 2,038 DUs pursuant to state law) is not exceeded. Therefore no mitigation improvement costs other than costs for specific improvement locations shared with Irvine, were identified within the City of Tustin for inclusion in this fee update.

2.3 Agreement with City of Santa Ana

A 1992 agreement between the City of Irvine and the City of Santa Ana resulted from the 1992 EIR approval that identified Irvine as the responsible party for the following improvements:

- Full financial responsibility for the costs to widen Dyer Road from a six-lane divided arterial to an eight-lane divided arterial between Red Hill Avenue and the SR-55 northbound on-ramp, including the intersection of Red Hill Avenue at Dyer Road/Barranca Parkway. Consistent with all improvements for which the City of Irvine has sole financial responsibility, 90% of total costs for this improvement is included in the 2015 IBC Traffic Fee Nexus Update.
- 50% of the costs to build the Alton Parkway Overcrossing at SR-55 in the City of Santa Ana.

The need for these improvements, and the allocation of responsibility to fund the improvements, was created in part by the development contemplated in the 1992 IBC Zoning, and as such the improvements were included in the 1992 Fee Program. An amendment to the 1992 agreement was negotiated and signed between the cities on March 21, 2011Following the approval of the IBC Vision Plan. The agreement redefined the Alton Parkway Interchange at SR-55 as Alton Parkway Overcrossing at SR-55, and maintained the financial responsibility of the City of Irvine on the two above mentioned projects, consistent with the 1992 agreement. Appendix C presents detail of the 1992 Settlement Agreement and the subsequent amendment.

Preliminary engineering cost estimates indicate that the Dyer Road widening is expected to cost $25,011,301. This cost includes estimates for Class II bikes lanes through the length of the project extent, consistent with the findings from the Project Report[4]. The total cost of the redefined Alton Parkway Overcrossing at SR-55 is estimated at $60,184,755. This cost includes the following list of additional improvements identified as mitigation in an updated traffic study[5] completed in 2010:

- Intersection #44: Red Hill Avenue at Alton Parkway;
- Signalization of the intersection of Halladay Street at Alton Parkway; and
- Signalization of the intersection of Daimler Street at Alton Parkway

For this update 90% of the cost of Dyer Road widening ($22,510,171) is included in the fee update. Pursuant to the City of Irvine and City of Santa Ana agreement, 50% of the Alton Parkway Overcrossing at SR-55 project ($30,092,378) is included in this update. Other than these two improvements, the only remaining Existing General Plan improvement per the cities' agreement included in this update is Intersection #719: Flower Street at Segerstrom Avenue that identifies a fair-share contribution of 9.6%, consistent with the Vision Plan Traffic Fee Nexus Study. City

[4] *Project Report for the Dyer Road/Barranca Parkway Improvements (State Route-55 to Aston Street), RBF Consulting, 2004*

[5] *Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening in the Cities of Santa Ana and Irvine, KOA, 2010*

of Irvine's fair-share for implementing improvements at the intersection of Flower Street at Segerstrom Avenue is $68,364 (9.6% of $712,124).

Hence, the 2015 IBC Traffic Fee Nexus Update includes a total of $52,670,912 as funds that would be required to implement improvements within the City of Santa Ana.

Appendix D presents detailed layout and cost estimate worksheets for each improvement.

2.4 Agreement with City of Costa Mesa

Based on the existing agreement between the Cities of Irvine and Costa Mesa, executed in 1993 and presented in Appendix E, the fair-share contribution towards one remaining Existing General Plan improvement included in this update is SR-55 Frontage Road SB Ramps at Paularino Avenue that identifies a fair-share contribution of 2.4%, consistent with the Vision Plan Traffic Fee Nexus Study. City of Irvine's fair-share for implementing improvements at this location is $28,970 (2.4% of $1.2 Million).

Appendix D presents a layout and cost estimate worksheet for this location.

2.5 Agreement with Caltrans District 12

Following the development of the Vision Plan and through consultation with Caltrans District 12 (Caltrans), on January 25, 2011, the City of Irvine and Caltrans entered into an agreement that identified feasible strategies that Caltrans would employ as mitigation for traffic impacts caused by the project on Caltrans facilities. Based on the findings from the Vision Plan Traffic Fee Nexus Study, it was determined that the fair-share cost of implementing these improvements would be $7,025,962 and it would constitute the City of Irvine's fair-share obligation as identified in the agreement. Appendix F presents the 2011 Traffic Mitigation Agreement between City of Irvine and Caltrans. Since the completion of the Vision Plan, the City of Irvine has collected and earmarked $440,663 as payment towards Caltrans agreement. Hence, this 2015 IBC Traffic Fee Nexus Update rolls over $6,585,299 ($7,025,962 less $440,663) from the Vision Plan Traffic Fee Nexus Study, as part of the funding need for implementing improvements associated with the buildout of the Vision Plan.

2.6 Transportation Improvements within the City of Irvine

2.6.1 Based on the 2015 IBC Traffic Study Update

The 2015 IBC Traffic Study Update identified the following eight deficient locations for which improvements were identified (refer to Table ES1.2 in the 2015 IBC Traffic Study Update).

- Intersection #97: Von Karman Avenue/Tustin Ranch Road at Barranca Parkway;
- Intersection #98: Von Karman Avenue at Alton Parkway;
- Intersection #134: Loop Road/Park Avenue at Warner Avenue;
- Intersection #135: Jamboree NB Ramps at Warner Avenue;
- Intersection #144: Jamboree Road at I-405 SB Ramps;
- Intersection #145: Jamboree Road at Michelson Drive;
- Intersection #188: Harvard Avenue at Michelson Drive;
- Intersection #229: Culver Drive at Alton Parkway;

For the purpose of the fee update, cost estimates were developed at six of these locations. Cost estimates were not necessary for intersections #144 (Jamboree Road at I-405 SB Ramps) and #145 (Jamboree Road at Michelson Drive).

- Intersection #144 (Jamboree Road at I-405 SB Ramps) improvement costs were not included in the updated fee because this location is a Caltrans facility and is part of the $7 million agreement with Caltrans. The specific improvement identified for #144 in the Vision Plan Traffic Fee Nexus Study called for widening of this off-ramp to add an approach lane resulting in two-left turn lanes and three-right turn lanes for an approach length of 500 feet, with the City's responsibility identified as 21.6% of a $1.5 million project. The 2015 IBC Traffic Study Update recommended a slightly altered improvement that reassigns these approach lanes to provide two-left turn lanes, one-shared left/right turn lane, and two-right turn lanes, all within the previously determined ROW, hence minimally impacting project costs.
- Intersection #145 (Jamboree Road at Michelson Drive) improvement costs were not included in the updated fee as a specific line item cost because $8,237,407 in CIP funding has been allocated from the IBC Traffic Fee Program Fund Balance to cover a portion of the estimated $17.7 million total cost to implement the pedestrian bridge. The pedestrian bridge across the north leg of the southbound Jamboree approach was proposed as part of the Vision Plan EIR because lane addition improvements at the intersection were determined to be operationally infeasible.

In addition, the 2015 IBC Traffic Study Update identified the following three locations for signalization.

- Armstrong Avenue at McGaw Avenue;
- Gillette Avenue at Alton Parkway;
- Teller Avenue at Dupont Drive;

At the time this report was being prepared, signalization efforts at Armstrong Avenue at McGaw Avenue and at Teller Avenue at Dupont Drive were underway and therefore were not included in the updated fee calculations.

Consistent with the Vision Plan Traffic Fee Nexus Study, this update also assumes 90% of the total cost of improvements within the City of Irvine ($20,007,030) or $18,006,327. It is assumed that the remaining 10% may be funded with outside funding sources such as federal, state and/or county grants.

2.6.2 Existing General Plan Improvements

The remaining Existing General Plan improvement not yet built in the IBC is the widening of Red Hill Avenue between Main Street and MacArthur Boulevard from four lanes to six lanes.

Originally identified in the 1992 EIR and 1992 Fee Program as an improvement that widens the arterial from its existing four lanes to an eight-lane facility, the Vision Plan determined that widening of this segment of Red Hill Avenue from four lanes to six lanes provided adequate traffic circulation to accommodate project buildout. The 2015 IBC Traffic Study Update concurs with that finding and this widening improvement to six lanes is consistent with the City's General Plan Circulation Element updated as part of the Vision Plan effort. The 90% of the cost for this improvement is $16,577,451 (or 90% of the total cost of $18,419,390) is included in the fee program.

Appendix D presents detailed concept layouts and cost estimate worksheets for each improvement that is included in the fee update.

2.7 Existing IBC Fund Balance

The current IBC Traffic Fee Program fund balance is the combination of the remaining funds from the 1992 Traffic Fee Program, balance of funds collected through the Vision Plan implementation since 2010, and earmarked funds

($440,663 – refer Section 2.5) allocated for Caltrans improvements per the settlement agreement with Caltrans. At the time of this update (i.e., snapshot date of July 31, 2015), the overall combined IBC Vision Plan Traffic Fee Program funds were $46,838,863.

As discussed in Section 2.6.1, $8,237,407 from this fund is allocated towards the construction of the pedestrian bridge over Jamboree Road at Michelson Drive. In addition, the City's CIP had allocated $4,766,978 towards the implementation of improvements at intersection #136 (Jamboree Road at Barranca Parkway) and intersection #141 (Jamboree Road at Main Street) from the IBC Traffic Fee Program fund. Subsequently, CIP funding for intersections #136 and #141 was augmented with an additional allocation of $14,350,000 ($5,030,000 for intersection #136 and $9,320,000 for intersection #141), bringing the total funding earmarked for these two intersections to $19,116,978. As these two intersection improvements were identified in the Vision Plan Traffic Study and 2010 Traffic Fee Nexus Study, and implementation was underway, these improvements were assumed to be constructed in terms of traffic analysis. Backing out the allocated funds for these committed improvements, the remaining IBC Traffic Fee Program funds available equaled $19,484,478 and this amount is applied towards this fee update. Table 2.2 summarizes the IBC fund balance applied towards this fee update.

Table 2.2: IBC Traffic Fee Funds applied towards 2015 Update*

Funds / Projects	Amount
IBC Vision Plan Traffic Fee Program funds	$46,838,863
Allocated funds for Jamboree/Michelson pedestrian bridge (included in CIP)	($8,237,407)
Allocated fund balance for Jamboree Road at Barranca Parkway, and Jamboree Road at Main Street improvements (included in CIP)	($19,116,978)
TOTAL	$19,484,478

*as of snapshot date of July 31, 2015
Source: City of Irvine

2.8 Other IBC Vision Plan Traffic Fee Program Costs

Consistent with the Vision Plan Traffic Fee Nexus Study, costs associated with Transportation Management Systems (TMS) are included in this update and will be reevaluated as part of the next two-year update. The TMS costs are estimated at 10% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, or approximately $7.44 million. As documented in the Vision Plan EIR, Project Design Feature (PDF 13-1) addresses the goals and objectives of the TMS as follows:

- Monitor travel demand at employment sites and provide reports on trip generation to the City;
- Offer employers and property owners assistance with transportation services on a voluntary basis;
- Deliver transportation services to commuters including a) ride-matching, transit/Metrolink information, b) inform commuters of incentives that may be available from public agencies, c) formation of vanpools;
- Represent the IBC in local transportation matters; and
- Oversee and fund the implementation and expansion of the i-Shuttle.

Program Administration costs are assumed in the fees as 5% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, for an amount of approximately $3.72 million to cover the next two years of staff and consultant time for administering annual fee updates, monitoring/updating the IBC database, inter-departmental and inter-agency coordination, reassessment of land use assumptions and reassessment of the Vision Plan and improvement list as required every two years, starting from this update cycle. Administration costs will also be reevaluated with the next two-year update.

Contingency costs (a standard practice in the industry to cover inflation rates and unforeseen costs) over the 20-year period are estimated at 15% of the effective total costs of improvements ($74,384,482) after subtracting the remaining IBC Traffic Fee fund balance, for an amount of approximately $11.16 million.

The summation of theseother IBC Vision Plan Traffic Fee Program costs for this update equals $22,315,345.

2.9 Development Agreement Cost Reduction

Development Agreements (DAs) currently exist between the City and the following five developments located in the IBC:

- Park Place;
- Central Park West;
- Hines;
- Avalon Apartments; and
- Alton Condominiums

The DAs specify the fees that were locked-in at the time of approval of each specific project. Consistent with the Vision Plan Traffic Fee Nexus Study, it is assumed for this update that two of the developers (Park Place and Central Park West) will continue to pay fees identified in their DAs. Therefore their related fees in the amount of approximately $4 million ($2,769,591 for Park Place and $1,233,998 for Central Park West) and the land use intensity associated with these fees were deducted from the calculation of the proposed updated fees. The intensity and related fees for the remaining three DAs (Hines, Avalon Apartments and Alton Condo) were included in the calculation of the updated fee.

3 Fee Methodology

The methodology used for this fee update is consistent with the Vision Plan Traffic Fee Nexus Study and each step for fee calculations is discussed in detail in the following sections.

3.1 Step 1: Identify Traffic Improvements and the IBC Fair-share

The mitigation measure improvements identified in the 2015 IBC Traffic Study Update to be included for the 2015 IBC Traffic Fee Nexus Update, are presented in Table 3.1. The improvements address project-related impacts based on thresholds of significance described in the traffic study. Improvements in Newport Beach and Tustin, with whom the City of Irvine has separate agreements are excluded from Table 3.1. As discussed previously in Section 2.3 and Section 2.4, select improvements in Santa Ana and Costa Mesa are included.

Table 3.1: Updated IBC Vision Plan Improvement List

Int ID	Intersection / Arterial Location	Jurisdiction	Improvement Strategy
97	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway *	Irvine	Add 3rd NBT and convert de facto right-turn to standard NBR
98	Von Karman Avenue at Alton Parkway *	Irvine	Add 3rd NBT
134	Loop Road/Park Avenue at Warner Avenue	Irvine	Add 3rd EBT and NBR overlap
135	Jamboree NB Ramps/Warner Avenue	Irvine	Add 2nd EBL
188	Harvard Avenue at Michelson Drive	Irvine	Widen SB to 2,2,1
229	Culver Drive at Alton Parkway	Irvine	Improve EB to 2,3,0 (de facto right)
	Red Hill Avenue between Main Street and Mac Arthur Boulevard	Irvine	Widen from 4 lanes to 6 lanes.
	Gillette Avenue at Alton Parkway	Irvine	New traffic signal (T-intersection)
	Alton Overcrossing at SR-55	Santa Ana**	SR-55/Alton Parkway Overcrossing Project plus the following improvements: • Intersection #44: Red Hill / Alton (Add 1 NBR, convert de facto SBR to 1 SBR, add 2nd EBL, convert 1 WBR to free WBR) • Signalization and widening of Halladay Street / Alton Parkway • Signalization at Daimler Street / Alton Parkway
	Dyer Road widening between SR-55 NB on ramp and Red Hill Avenue (Phase 2)	Santa Ana**	Dyer Road widening from SR-55 to Red Hill Avenue (consistent with Barranca-Dyer Project Report)
719	Flower Street and Segerstrom Avenue	Santa Ana	Add eastbound de facto lane
10	SR-55 Frontage Road SB Ramps at Paularino	Costa Mesa	Improve Southbound to 1.5 Left, 1.5 Through, 1 Right.

Source: HDR 2015

* Due to close proximity of improvements, for cost development, these two locations were combined and treated as one contiguous corridor on Von Karman Avenue between Alton Parkway and Barranca Parkway/Tustin Ranch Road.

**Agreement with Santa Ana.

3.2 Step 2: Estimate Total Cost to Implement 2015 IBC Improvement List

In order to implement the improvements identified in the 2015 IBC Traffic Study Update, a total cost of $92,696,238 (see Table 2.1) must be programmed into this fee update effort. This cost includes the cost of the improvements, roll over from the Caltrans agreement (see Section 2.5), deduction of the available fund balance from the IBC Traffic Fee Program (see Table 2.2), project soft costs (see Section 2.8) and deduction of fees related to the two existing Development Agreements (see Section 2.9).

Based on the preliminary engineering and cost estimates, the cost of the needed improvements is $93,868,960 and includes the following:

- 90% of costs related to improvements within City of Irvine and Santa Ana (widening of Dyer Road per agreement between City of Santa Ana and Irvine);
- Fair-share obligation to improvements in Santa Ana and Costa Mesa (remaining GP improvements); and
- Roll over of fair-share obligations pursuant to the Caltrans agreement from 2010.

Table 3.2 presents the list of improvement locations, along with project cost for each, City of Irvine's share and cost of improvements included in the 2015 IBC Traffic Fee Nexus Update.

Preliminary engineering layouts and detailed cost estimates were developed for each improvement. All improvement strategies identified to mitigate traffic impacts caused by the buildout of the Vision Plan were vetted through a review process with City of Irvine planning and engineering staff and were determined to be feasible. The following section discusses in detail the methodology for developing cost estimates.

3.2.1 Development of Improvement Costs

For the purpose of developing planning level cost estimates for each of the improvements, unit costs and planning level concept plans were developed. The concept level plans were based off most recent aerial imagery and field reconnaissance.

<u>Unit Cost Development</u>

Unit costs including ROW costs were reviewed and updated based on Caltrans cost data for 2015 and bid data provided by the City between 2013 and 2015. The 2015 unit costs were compared to the 2010 unit costs for reasonability and the following changes were made to the soft cost:

- ROW support costs were increased from 5% to 10% of construction costs
- Minimum Project Development cost was increased from $200,000 to $300,000

Table 3.2: Updated IBC Vision Plan Improvement List and Associated Cost for Fee Calculation

Int ID	Intersection / Arterial Location	Jurisdiction	Cost	Fair Share	Cost included for Fee Calculation
97 *	Von Karman Avenue/Tustin Ranch Road at Barranca Parkway [1]	Irvine	$7,558,713	90%	$6,802,842
98 *	Von Karman Avenue at Alton Parkway [1]	Irvine		90%	
134	Loop Road/Park Avenue at Warner Avenue [1]	Irvine	$5,411,023	90%	$4,869,921
135	Jamboree NB Ramps/Warner Avenue [1]	Irvine	$2,592,998	90%	$2,333,698
188	Harvard Avenue at Michelson Drive [1]	Irvine	$2,752,766	90%	$2,477,489
229	Culver Drive at Alton Parkway [1]	Irvine	$1,204,030	90%	$1,083,627
	Red Hill Avenue between Main Street and Mac Arthur Boulevard [2]	Irvine	$18,419,390	90%	$16,577,451
	Gillette Avenue at Alton Parkway [1]	Irvine	$487,500	90%	$438,750
	Alton Overcrossing at SR-55 [3]	Santa Ana	$60,184,755	50%	$30,092,378
	Dyer Road widening between SR-55 NB on ramp and Red Hill Avenue (Phase 2) [3]	Santa Ana	$25,011,301	90%	$22,510,171
719	Flower Street and Segerstrom Avenue [4]	Santa Ana	$712,124	9.6%	$68,364
10	SR-55 Frontage Road SB Ramps at Paularino [5]	Costa Mesa	$1,207,101	2.4%	$28,970
				Cost of Improvements	$87,283,661
				Caltrans agreement roll over **	$6,585,299
				2015 Update IBC Vision Plan Improvement Cost	$93,868,960

Source: HDR 2015
* Due to close proximity of improvements, for cost development, these two locations were combined and treated as one contiguous corridor on Von Karman Avenue between Alton Parkway and Barranca/Tustin Ranch Road
** Caltrans D12 agreement with City of Irvine ($7,025,962 minus $440,663 set aside as Caltrans Subfund)
[1] Irvine improvements - full financial responsibility to be funded at 90% through IBC Traffic Fee Program funds
[2] Irvine improvements - remaining Irvine General Plan improvement to be funded at 90% through IBC Traffic Fee Program funds
[3] Santa Ana improvements – full or financial responsibility per agreement
[4] Santa Ana improvements - remaining Irvine General Plan improvement for which City of Irvine has a fair share
[5] Costa Mesa improvements - remaining Irvine General Plan improvement for which City of Irvine has a fair share financial responsibility

Concept Development and Cost Estimates

Planning level concepts were developed based on publicly available "off the shelf" current aerial imagery. Utility identification, including sewer and overhead electrical lines, were determined to the extent possible from publicly available aerial photography. Length of turn pockets where needed was determined based on traffic data where appropriate. Consistent with the Vision Plan Traffic Fee Nexus Study, cost estimates included provisions for the following:

- Preliminary Project Development
- ROW Management
- Design Engineering/Administration Cost
- Construction Engineering Costs/Administration

- Construction Contingency

3.3 Step 3: Identify Remaining IBC Traffic Fund Revenues and Soft Costs to Determine Total Fee for 2015 Update

Based on the discussion in Section 2.7 and data presented in Table 2.2, an amount of $19,484,478, (effective IBC Traffic funds available to be applied toward the 2015 Fee Program) was subtracted from the total needs cost of $93,868,960 shown in Table 3.2.

Other IBC Traffic Fee Program costs, estimated at $22,315,345 and discussed in detail in Section 2.8 were added to the difference between improvement cost needs and the existing available IBC Traffic Fee Program Fund balance ($74,348,482). Finally, fees paid and those that will be paid by developers pursuant to their Development Agreements (DAs) in the amount of $4,003,589, were subtracted from the total value. Table 3.3 summarizes the value for each of the items that determine the final amount of $92,696,238 that must be programmed into this fee update effort.

Table 3.3: Summary of IBC Traffic Fee Update Cost Elements

Items	Cost
2015 Update IBC Vision Plan Improvement Cost*	$93,868,960
Existing IBC Traffic Fee Program Funds (amount to be subtracted)	($19,484,478)
(Effective) 2015 Updated IBC Vision Plan Improvement Cost	$74,384,482
Other IBC Traffic Fee Program (Transportation Management Systems, IBC Program Administration, Contingency)	$22,315,345
Development Agreements (amount to be subtracted)	($4,003,589)
Total Amount to be programmed for the 2015 Fee Update	$92,696,238

* includes Caltrans roll over
Source: HDR 2015

3.4 Step 4: Estimate the Remaining Development subject to 2015 Traffic Fee Update

Based on a thorough review of the City of Irvine IBC database records and Development Agreements (DAs), the remaining developable land uses under the Vision Plan buildout condition were quantified to define appropriate land use fees to fund the transportation improvements identified for this update.

Existing land uses as of the July 31, 2015 snapshot and forecast Year 2035 Vision Plan buildout land uses were applied in the determination of the land use specific traffic impact fees. Consistent with the underlying approach behind the development of the Vision Plan, increases in residential density throughout the IBC result in an overall reduction of non-residential uses (i.e., manufacturing, warehouse and mini-warehouse uses). The Vision Plan approved a residential cap of 15,000 base units plus a maximum potential of 2,038 density bonus units pursuant to state legislation. Based on approvals since 2010 and consistent with the 2015 IBC Traffic Study Update, the total number of density bonus units equals 1,794 DU, less than the 2,038 DU maximum, bringing the total number of DUs to 16,794 DUs, instead of 17,038 DUs assumed in 2010. The 2015 Traffic Fee Nexus Update also assumed that all remaining density bonus units will be charged fees consistent with the market-value base units.

In determining the remaining development subject to traffic impact fees, previous DAs and prepaid fees were considered. In 2005, the City of Irvine included an option for developers to prepay fees for projects under consideration to avoid updated fee adjustments that might occur subsequent to the 2005 update. Developers took advantage of this option and fees were paid for DUs and office equivalency square footage (SF). While there may be prepayment for specific projects that did not move forward based on the past fluctuating economic climate, the prepayment remains valid for future development projects for those identified parcels. As a result, these units and office equivalency SF were excluded from this update. In addition, for the following three developments, fees were paid after the "snap-shot" date for this update (July 31, 2015). Hence, the quantities associated with these developments were included for the 2015 update, however, the prepaid fees from these developments will remain valid and these developments will not be subject to new fees developed through this update.

- 16103 Derian Avenue (formerly 17275 Derian Avenue)
- 360 Fusion (formerly Murphy Apartments, 2852 McGaw Avenue, 17321-17351 Murphy Avenue)
- Main and Jamboree Apartments (2699-2719 White Road, 2772 Main Street)

3.4.1 Dwelling Unit Distribution – 2015 Update

This section presents the status of the maximum allowable dwelling units (DUs) within IBC. The land use assumption for the 2015 IBC Traffic Study Update assumes a total of 7,060 DUs (6,676 base DUs plus 384 density bonus DUs) on the ground in 2015, and 16,794 DUs (15,000 base DUs plus 1,794 density bonus DUs) in buildout Year 2035. Table 3.4 presents a status breakdown of the remaining DUs between Year 2035 and Year 2015. At the time of this update, 122 DUs (60 base DUs and 62 density bonus DUs) did not have a status reported, i.e. were not under construction nor approved or pending. The table indicates that for much of the remaining IBC DUs, fees were prepaid, hence only a few developments remain that will be subject to the updated fees developed as part of this update effort.

Table 3.5 presents the breakdown of land use quantities that will be subject to the updated fee, and Appendix G presents details of developments by parcel.

Table 3.4: IBC Dwelling Unit Summary

Base Units	Density Bonus Units	Total	Details
15,000	1,794	16,794	Maximum allowable DUs allowed for IBC Vision Plan Traffic Program
6,676	384	7,060	DUs on the ground in 2015
4,065	*23*	*4,088*	*DUs Existing at time of approval of Vision Plan*
2,611	*361*	*2,972*	*DUs Existing (on the ground) between 2010 and 2015*
Breakdown of Remaining Units between Year 2035 and Year 2015			
Base Units	Density Bonus Units	Total	Details
8,324	1,410	9,734	Remaining DUs between Year 2015 and Year 2035
8,264	1,348	9,612	Total DUs: under construction/approved/pending
2,020	*323*	*2,343*	*Units Under Construction accounted between 2010 and 2015*
836	*228*	*1,064*	*Units Approved – IBC fees paid between 2010 and 2015*
600	*148*	*748*	*Units Approved – IBC fees paid after 07/31/15 snapshot date* *16103 Derian Avenue* *360 Fusion* *Main and Jamboree Apartments*
2,887	*312*	*3,199*	*Units Approved – no IBC fees paid*
8	*0*	*8*	*Units Approved - fees paid prior to 2010*
1,913	*337*	*2,250*	*Units In Process / Pending - no fees paid*
60	62	122	DUs not associated with known projects*

*as of the snapshot date of July 31, 2015
Source: City of Irvine

Table 3.5: Future Land Use Intensity Subject to the Updated Traffic Fee

	Base (DU)	Density Bonus (DU) *	TOTAL (DU)	Extended Stay (Rooms)	Hotel (Rooms)	Retail Mix (Sq. ft.)	Office (Sq. ft.)	Industrial Mix (Sq. ft.)	Mini Ware-House (Sq. ft.)
2010 Baseline (for reference)	4,779	232	5,011	174	2,322	1,341,002	174	14,700,922	348,056
2015 Baseline (on the ground conditions) [1]	6,676	384	7,060	474	2,322	1,384,000	26,639,000	13,934,000	379,000
2035 Buildout Cumulative with Project	15,000	1,794	16,794	1,049	2,653	1,690,000	34,286,000	12,339,000	549,000
Remaining Development (2015 to 2035)	8,324	1,410	9,734	575	331	306,000	7,647,000	-1,595,000	170,000
Central Park West and Park Place Development (not subject to updated fee per their individual DAs)	2,277	128	2,405	0	0	149,250	2,674,820	0	0
ADJUSTED Remaining Development between 2015 and 2035 (quantities reflect subtraction of intensity related to Central Park West and Park Place DAs) [2]	6,047	1,282	7,329	575	331	156,750	4,972,180	-1,595,000	170,000
Other Developments with prepaid fees prior to 07/31/15 snapshot date	*1,987*	*423*	*2,410*	*161*	*0*	*3,224*	*0*	*0*	*0*
REMAINING DEVELOPMENT SUBJECT TO UPDATED TRAFFIC FEE [3]	4,060	859	4,919	414	331	153,526	4,972,180	-1,595,000	170,000
LAND USE BREAKDOWN									
DEVELOPMENT AGREEMENTS									
Central Park West									
Existing (Fees Paid)	*646*	*0*	*646*	*0*	*0*	*0*	*0*	*0*	*0*
Under Construction (Fees Paid)	*16*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*613*	*0*	*613*	*0*	*0*	*26,688*	*0*	*0*	*0*
TOTAL	1,275	0	1,275	0	0	26,688	0	0	0
Park Place									
Existing (Fees Paid)	*1,442*	*232*	*1,674*	*0*	*190*	*0*	*0*	*0*	*0*
Under Construction (Fees Paid)	*861*	*128*	*989*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*787*	*0*	*787*	*0*	*0*	*122,562*	*2,674,820*	*0*	*0*
TOTAL	3,090	360	3,450	0	190	122,562	2,674,820	0	0

Table 3.5: Future Land Use Intensity Subject to the Updated Traffic Fee

	Base (DU)	Density Bonus (DU) *	TOTAL (DU)	Extended Stay (Rooms)	Hotel (Rooms)	Retail Mix (Sq. ft.)	Office (Sq. ft.)	Industrial Mix (Sq. ft.)	Mini Ware-House (Sq. ft.)
OTHER DEVELOPMENTS (INCLUDES HINES, AVALON BAY, ALTON CONDOS DAs)									
Approved (Fees Paid prior to 2010)	*8*		*8*						
Existing (Fees Paid)	*523*	*129*	*652*	*290*	*0*	*0*	*415,696*	*40,753*	*257,525*
Under Construction (Fees Paid)	*1,143*	*195*	*1,338*	*161*	*0*	*3,224*	*0*	*0*	*0*
Approved (Fees Paid)	*836*	*228*	*1,064*	*0*	*0*	*0*	*0*	*0*	*0*
Demolished/Pending Demo(Fees not paid)	*0*	*0*	*0*	*0*	*0*	*0*	*41,609*	*248,246*	*0*
In Process / Pending (Fees not Paid)	*1,913*	*337*	*2,250*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees Paid after 07/31/15) [4]	*600*	*148*	*748*	*0*	*0*	*0*	*0*	*0*	*0*
Approved (Fees not paid)	*1,487*	*312*	*1,799*	*0*	*0*	*15,500*	*785,000*	*0*	*0*
TOTAL	6,510	1,349	7,859	451	0	18,724	1,242,305	288,999	257,525

Source: City of Irvine
* Density Bonus Units will be charged fees consistent with the market value
[1] Quantities includes land use that was on the ground prior to 2015
[2] Backing out quantities for CPW and Park West (only "Under Construction" and "Approved")
[3] Obtained by subtracting quantities that are either "Under Construction" or "Approved" for which fees are already paid
[4] Developments that paid fees after the July 01, 2015 deadline. Hence the fees and associated LU intensity will be included in the fee calc, but these developments will not be subject to new 2017 fees

The remaining quantities of land use subject to the updated fees were determined based on the following procedures, with an example provided in Table 3.6 relating to the residential base units:

- 1: Calculate difference in land use quantities between Year 2015 and Year 2035.
- 2: Calculate land use quantities for Central Park West and Park Place DAs (see Section 2.9 for discussion) to be subtracted from the first procedure above.
- 3: Calculate quantities of land use from other developments where the developer has prepaid IBC fees within the "snap shot" period for this update, for subtraction from the second procedure above. For the three developments where fees were paid after the "snap shot" deadline, the quantities were included for the calculation, but these developments will not be subject to new fees.
    - Any quantities designated as "existing" in Table 3.5 and Table 3.6 were not subtracted because they were included in the quantities that represent Year 2015 on the ground conditions.

Table 3.6: Example Procedures to Determine Land Use Subject to Updated Fee

Procedure	Land Use Description	Quantities	Calculation
1.	Residential Land Use considered for 2015 Baseline	6,676 DU	
	Residential Land Use considered for 2035 Buildout	15,000 DU	15,000 – 6,676 = 8,324 DU
2.	Development Agreements (note: "existing" quantities were not subtracted because these are already included in the 2015 on the ground conditions (Baseline) Central Park West: 1,275 *Existing: 646 (not included in this calculation)* *Under Construction: 16* *Approved: 613* Park Place: 3,090 *Existing: 1,442 (not included in this calculation)* *Under Construction: 861* *Approved: 787*	(16+613) + (861+787) = 2,277 DU	8,324 – 2,277 = 6,047 DU
3.	Other Developments (note: "existing" quantities were not subtractedbecause these are already included in the 2015 on the ground conditions (Baseline); developments that paid fees after the 07/31/15 snapshot date were not subtracted) *Approved (fees paid prior to 2010): 8* *Existing: 523 (not included in the calculation)* *Under Construction (Fees Paid): 1,143* *Approved (Fees Paid): 836* *Demolished/Pending Demo(Fees not paid): 0* *In Process / Pending (Fees not Paid): 1,913* *Approved (Fees Paid after 07/31/15): 600* *Approved (Fees not paid): 1,487*	8+1,143+836 = 1,987 DU	6,047 – 1,987 = 4,060 DU

Source: City of Irvine, HDR

3.5 Step 5: Estimate of Total Development Intensity Value (DIV)

Since 1992, the IBC study area has had provisions in place to allow for Transfers of Development Rights (TDRs) through the creation of a Development Intensity Value (DIV) budget system in which an allocation of AM, PM and ADT DIVs are assigned to each property in the IBC. These DIVs must be transferred in blocks (AM, PM and ADT) to other properties through a conditional use permit process and accompanying traffic study. The total DIVs associated with the remaining development required for full buildout of the Vision Plan was calculated by applying the IBC trip generation rates to the land use quantities.

Table 3.7 presents the established DIV rates applied in this update and is consistent with those used for the Vision Plan Traffic Fee Nexus Study. Based on the remaining development subject to the updated traffic fee determined in Section 3.4, Step 4, multiplied by the IBC DIV rates, the total DIVs equate to 10,263 (refer to Table 3.8). Consistent with the methodology used for the Vision Plan Traffic Fee Nexus Study and previous IBC fee reports, the PM peak hour DIV rates were applied for all land uses because for a majority of the land uses, the PM peak hour rate is the maximum DIV rate. The PM peak hour rates represent the maximum DIV rate for all IBC land use categories with the exception of industrial and mini-warehouse uses; however for those uses, the DIV rates are significantly less in comparison to the other land uses.

Table 3.7: IBC Land Use DIV Rates

Trip Rate	Residential (per DU)	Extended Stay (per Room)	Hotel (per Room)	Retail Mix (per sq. ft.)	Office (per sq. ft.)	Industrial Mix (per sq. ft.)	Mini Warehouse (per sq. ft.)
PM Peak Hour	0.52	0.42	0.68	0.00696	0.00138	0.00042	0.00027

Source: City of Irvine, ITE, Table 4, IBC Vision Plan Traffic Fee Nexus Study, January 2011

The Vision Plan utilizes a flexible zoning concept, meaning that to account for the planned increase in residential units under the Vision Plan, quantities of planned land uses from other categories such as manufacturing and their associated development intensity would be reduced. This is the reason for the negative quantities (see row "Remaining Development (2015 to 2035)) identified in Table 3.5 and Table 3.8. If the quantities of land uses that were assumed to be developed under the IBC Vision Plan do not develop as planned, the PM peak hour trips associated with those land uses will be available for use for other types of development.

The Vision Plan is an overlay zone that allows for flexibility in land use development. Once the development intensity available in the IBC (identified in Chapter 9-36 of the Zoning Ordinance) is exhausted, no additional development can take place without a General Plan Amendment that intensifies the IBC planning area. The City of Irvine continues to monitor the development patterns in the IBC annually to evaluate how the Vision Plan is taking shape, to ensure that there is sufficient development intensity for the maximum assumed residential and mixed-use development. Subsequent to this update, the reassessment of the IBC Vision Plan Traffic Study will be conducted every two years, with the next update commencing in Fall 2017.

3.6 Step 6: Normalization of Retail and Office Land Uses

In accordance with established precedent in the City and consistent with the mixed-use vision, to encourage additional commercial and retail development in the IBC, the office and retail mix land uses have been normalized in the calculation of remaining developments subject to fee. Because the retail mix land use PM peak hour trip rate is significantly higher (over 5 times higher – 0.00696 for retail mix; 0.00138 for office) than the office land use, the fees for retail mix development are normalized, creating a fee structure in which retail mix and office square footage cost is equivalent. Table 3.8 identifies the normalization of DIVs and land use for office and commercial land uses.

3.7 Step 7: Estimate Cost per DIV

The cost associated per DIV to implement the Vision Plan improvements was calculated by dividing the total program cost by the total number of normalized DIVs that must participate in the funding program. Table 3.9 estimates that the cost per DIV will be $9,032.09. Table 3.10 presents the maximum development fees for each land use category through application of the cost per DIV to the normalized DIVs associated with each category.

Table 3.8: IBC Total DIVs

Land Use	Unit	Remaining Development Subject to Updated Fee	DIVs (rounded)	Remaining Development Subject to Updated Fee (normalized quantities)	Normalized DIVs (rounded)
Residential *	DU	4,919	2,558	4,919	2,558
Extended Stay	Rooms	414	174	414	174
Hotel	Rooms	331	225	331	225
Retail Mix	Sq. Ft.	153,526	1,069	2,562,853	3,965
Office	Sq. Ft.	4,972,180	6,862	2,562,853	3,965
Industrial Mix **	Sq. Ft.	-1,595,000	-670	-1,595,000	-670
Mini-Warehouse	Sq. Ft.	170,000	46	170,000	46
TOTAL DIVs			10,263		10,263

Source: HDR
* includes Base and Density Bonus Units, since Density Bonus Units will be charged as market (Base) units
** includes manufacturing and warehouse sq. ft.

Table 3.9: Cost Estimate per DIV

Total Traffic Fee Program Cost	$92,696,238
Total number of DIVs generated	10,263
Cost per DIV	$9,032.08

Source: HDR

Table 3.10: Traffic Fee Estimates for each Land Use Category

Land Use	Unit	Remaining Development Subject to Updated Fee (normalized quantities) *	Cost per DIV (rounded)	Normalized DIVs (rounded)	Development Fees (Maximum)
Residential	DU	4,919	$9032.08	2,558	$23,104,061
Extended Stay	Rooms	414	$9032.08	174	$1,571,582
Hotel	Rooms	331	$9032.08	225	$2,032,218
Retail Mix	Sq. Ft.	2,562,853	$9032.08	3,965	$35,812,197
Office	Sq. Ft.	2,562,853	$9032.08	3,965	$35,812,197
Industrial Mix ***	Sq. Ft.	-1,595,000	$9032.08	-670	-$6,051,494
Mini Warehouse	Sq. Ft.	170,000	$9032.08	46	$415,476
			TOTAL	10,263	$92,696,238

Source: HDR
* Obtained from Table 3.8
** includes Base and Density Bonus Units, since Density Bonus Units will be charged as market (Base) units
*** includes manufacturing and warehouse sq. ft.

3.8 Step 8: Estimate Cost per Development Unit

To establish the cost per development unit, the maximum fees associated with each land use determined in Section 3.7, Step 7 are divided by the quantity associated with each land use category. Table 3.11 represents the fee per measurable unit for each land use category.

Table 3.11: Traffic Fee Summary

Land Use	Unit	Remaining Development Subject to Updated Fee	Remaining Development Subject to Updated Fee (normalized quantities)	Development Fees (Maximum)	Updated Fee ***
Residential	DU	4,919	4,919	$23,104,061	$4,697
Extended Stay	Room	414	414	$1,571,582	$3,796
Hotel	Room	331	331	$2,032,218	$6,140
Retail Mix	Sq. Ft.	153,526	2,562,853	$35,812,197	$13.97
Office	Sq. Ft.	4,972,180	2,562,853	$35,812,197	$13.97
Industrial Mix **	Sq. Ft.	-1,595,000	-1,595,000	-$6,051,494	$3.79
Mini-Warehouse	Sq. Ft.	170,000	170,000	$415,476	$2.44
				$92,696,238	

Source: HDR 2015
* Includes Density Bonus Units that will be charged fees at the same rate as Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

Table 3.12 presents a fee comparison between the 1992 fees (at the onset of the IBC Traffic Fee Program), 2009 fees (developed through annual adjustments of the 1992 fee), 2010 fees (developed as part of the Vision Plan), 2016 fees (currently what the City charges developers – this is developed by applying annual adjustments to the 2010 fee) and proposed updated fees.

Table 3.12: IBC Fee Comparison

Land Use	Unit	IBC Traffic Fee					Increase from 2016 (factor)
		1992	2009	2010	2016	Proposed***	
Total Residential	DU	$3,734	$7,175	$1,862	$2,254	$4,697	2.08
Extended Stay	Rooms	$3,016	$5,795	$1,503	$1,820	$3,796	2.09
Hotel	Rooms	$4,883	$9,383	$2,435	$2,947	$6,140	2.08
Retail Mix	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Office	Sq. Ft.	$10.70	$20.28	$5.45	$6.60	$13.97	2.12
Industrial Mix **	Sq. Ft.	$3.30	$5.85	$1.50	$1.82	$3.79	2.08
Mini Warehouse	Sq. Ft.	$1.85	$3.55	$0.97	$1.17	$2.44	2.09

Source: HDR 2015, City of Irvine
* Includes Density Bonus Units charged fees consistent with Base Units
** Includes manufacturing and warehouse SF
*** Effective FY 2017-2018

As can be seen in Table 3.12, the proposed fee is significantly higher than the 2010 and 2016 fees. There are a few reasons behind this increase: (a) new improvements and increases to cost of improvements, (b) fewer developments remaining that are subject to updated fees, and (3) lower remaining funds in the IBC Traffic Fee Program.

Significant Increase in Improvement Costs between 2010 and 2016

- Unit costs have increased moderately between 2010 and 2016 (when the cost estimates were developed), contributing to increase of project cost.
- Increase of right of way (ROW) support costs from 5% to 10% of construction costs, based on current trends in ROW acquisitions, have significantly increased the costs for improvements that require ROW acquisitions.
- New improvements were identified in the 2015 IBC Traffic Study Update that had not been identified in the Vision Plan Traffic Study including:
    - Von Karman/Tustin Ranch Road at Barranca Parkway and Von Karman Avenue at Alton Parkway: Although identified as two separate deficient intersections, based on the geometrics of improvements, the proximity of these adjacent intersections and the efficiency of traffic flow between them, the cost estimate considered this improvement as a corridor improvements that considered widening of Von Karman Avenue between Barranca Parkway and Alton Parkway.
    - Loop Road/Park Avenue at Warner Avenue
    - Jamboree northbound ramps at Warner Avenue
    - Culver Drive at Alton Parkway

- Increases in costs were identified for a few improvements previously identified in the 2010 IBC Traffic Fee Nexus Study. These are briefly discussed below:
    - Alton Overcrossing at SR-55: The Vision Plan Traffic Fee Nexus Study included an estimate of $17.5 million (50% of a total $35 million cost) as the City of Irvine's fair-share contribution pursuant to the agreement with Santa Ana. However, for this update, the total cost has increased to $60 million, resulting in City of Irvine's fair-share contribution of $30 million (50% of the total $60 million cost). This approximate two-fold increase in cost is attributable to the project's current definition which includes additional improvements that must be included as part of the City of Santa Ana's Alton Overcrossing at SR-55 Capital Improvement Program (CIP) project based on an updated traffic study[6] conducted by the City of Santa Ana in 2010. The cost estimate for this Overcrossing project (without the additional improvement costs) was updated in 2014 and was estimated at $55.5 million. As part of the 2015 IBC Traffic Fee Nexus Update, the cost estimate at this location was developed considering the $55.5 million estimated cost plus the cost of the additional improvements resulting from Santa Ana's 2010 traffic study including improvements at intersection #44: Red Hill Avenue at Alton Parkway; signalization and widening of Halladay Street at Alton Parkway; and signalization at Daimler Street at Alton Parkway).
    - Widening of Dyer Road between SR-55 NB on-ramp and Red Hill Avenue: The cost included in the Vision Plan Traffic Fee Nexus Study was $9 million (90% of a total estimated $10 million) based on the Barranca Parkway/Dyer Road Project Report[7] prepared in 2004. With this update, the cost for this improvement increased significantly to $22.5 million (90% of a total cost of $25 million). The Project Report was revisited to ensure that the cost estimates reflected the continuation of the Class II bike lanes on either side of Dyer Road/Barranca Parkway between Red Hill Avenue and the SR-55 NB on-ramp. The necessary widening of Barranca Parkway/Dyer Road will result in partial takes of three properties located (1) west of the railroad tracks and south of Dyer Road; (2) west of Pullman Street and south of Dyer Road; and (3) west of Pullman Street and north of Dyer Road. The partial takes of these properties and the cost for Class II bike lanes add significant costs to the project.
    - Widening of Red Hill Avenue between Main Street and MacArthur Boulevard: For this update, the cost estimate for this improvement (90% of cost) is significantly higher ($18.4 million in 2016, vs. $8.7 million in 2010) due to higher ROW costs, and is attributable to the inclusion of the bike lanes on either side of Red Hill Avenue.

Fewer number of Remaining Development Units and Square Footage Subject to Fee

- As the Vision Plan gets implemented, the number of developable units remaining decreases, resulting in fewer quantities of land use subject to updated fees.
- Since 2005, developers have been taking advantage of the option of prepayment of fees for projects under consideration (see discussion in Section 3.4), thereby further reducing the developable units (residential and non-residential) subject to fee. A comparison with the Vision Plan Traffic Fee Nexus Study shows that the total number of DIVs in 2010 were 17% higher than in 2015, or in other words, the quantity of remaining

[6] *Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening in the Cities of Santa Ana and Irvine, KOA Corporation, 2010*

[7] *Project Report for the Dyer Road/Barranca Parkway Improvements (State Route 55 to Aston Street), RBF Consulting, 2004*

developable units and square footage in 2010 was greater than in 2015. The combination of developable units subject to fee and the higher cost of improvements contribute towards higher fees.

Lesser Remaining Available IBC Traffic Fund Balance

- The Vision Plan Traffic Fee Nexus Study recommended removal of several improvements originally identified in 1992 because they were deemed unnecessary. This resulted in a significant reduction of fees as can be seen in Table 3.12 (2009 vs. 2010). Hence between 2010 and 2015, the rate at which fees were imposed was lower than the pre-2010 years.
- Subsequent to the adoption of the Vision Plan, large sums of payouts were made to the Cities of Newport Beach ($3.65 million) and Tustin ($4.5 million), per the agreements between the Cities and City of Irvine (see Section 2.1 and Section 2.2).
- In addition, a sizeable amount of IBC Traffic Fee funds ($27.4 million – see Table 2.2) are allocated to implement CIP projects identified in the Vision Plan Traffic Study (improvements at the intersections of Jamboree Road at Main Street, Jamboree Road at Barranca Parkway, and the pedestrian bridge at the intersection of Jamboree Road at Michelson Drive). Lower collection rates and a higher allocation of funds to the CIP projects have led to a significantly smaller amount ($19.5 million) of remaining available Vision Plan Traffic Fee Program funds rolled over in this update as compared to 2010. Although the updated fee is higher than 2010, it still remains about 31%-35% lower than what was being charged in 2009.

4 Establishing Nexus

Section 1, Introduction discussed the requirement for a fair-share nexus between the mitigation requirements of the EIR and the traffic fees associated with the necessary mitigation improvements. The introduction further indicated a requirement to substantiate this nexus based on the adopted State legislation to ensure that fees collected are associated with development impacts and the physical improvements. The following statements fulfill the nexus requirements.

4.1 Identify the Purpose of the Impact Fee

The purpose of the 2015 IBC Traffic Fee Nexus Update is to:

- Clearly identify a fee rate to mitigate project related impacts within the IBC study area to an acceptable level of service.
- Mitigate the traffic impacts of new development within the IBC Vision Plan area under the expected buildout commensurate with the EIR Traffic Impact Mitigation Measures under CEQA and other agreements through which a fair-share of improvement costs have been contractually identified in an arms length negotiation.

The 2015 IBC Traffic Study Update evaluated the circulation system of the IBC study area under With and Without Project conditions. The study accounted for approved and pending projects within the IBC study area and forecast regional growth in both interim-year 2020 and Post-2035 buildout conditions. The Without Project conditions for each scenario assumed existing 2015 on-the ground development. The With Project conditions for each scenario included expected development within the IBC area, including the addition of residential DUs through the conversion of non-residential office equivalency square footage as identified in the traffic study.

Utilizing the intersection capacity utilization (ICU) analysis that measures peak hour intersection capacity and performance to assess impacts, the 2015 IBC Traffic Study Update identified project impacts at locations within and outside the City of Irvine, based on the City's TIA guidelines (2004) and those set by each of the affected jurisdiction/agencies (Caltrans and the cities of Newport Beach, Tustin, Santa Ana, Costa Mesa). For details on project- related thresholds, refer to the 2015 IBC Traffic Study Update[8]. As the traffic impacts are the responsibility of the project under CEQA, it is the responsibility of the project to mitigate the project impacts or contribute its fair-share towards each improvement. Thus, the Vision Plan is responsible for mitigating all the project traffic impacts to an acceptable level of service or to existing conditions performance levels. All future development under the Vision Plan will contribute to future circulation system impacts identified in the traffic study and will pay for the necessary improvements to deliver an acceptable level of service.

4.2 Identify the Use of the Impact Fee

The use of the proposed fee is the following:

- To fund the Vision Plan circulation improvements within the City of Irvine.
- To fund improvements to the State Highway System that will contribute to enhanced operations.
- To compensate adjacent jurisdictions for traffic impacts as a result of implementation of the Vision Plan.

The traffic fee will be used to mitigate traffic impacts from the buildout of the Vision Plan both within Irvine and in neighboring jurisdictions/agencies. The fee will be used to pay for improvements that accommodate residential

[8] *Irvine Business Complex Vision Plan – 2015 Five-Year Traffic Study Update, Iteris, HDR, 2016*

intensity increases within the IBC. Without the improvements, the project impacts would not be mitigated as necessary.

4.3 Determine Reasonableness Relationships

As discussed in Section 1.2, Purpose of the 2015 Update to the Vision Plan Nexus Study, California's Mitigation Fee Act creates the legal framework for local governments to assess new fees toward future development to pay its fair-share of the infrastructure cost necessary to serve new residents and businesses. AB 1600 stipulates that a local government must establish a "nexus" or reasonable relationship between a proposed fee and the impacts attributable to the developments paying the fee:

4.3.1 Reasonableness Between Use of Fee and the Type of Development on which the Fee is imposed

- IBC fees will be applied directly to the funding needs for each identified improvement within the City of Irvine and towards any pending financial obligation determined through existing agreements with adjacent jurisdictions regarding Vision Plan traffic impacts.
- IBC fees are collected from new development within the IBC that directly increases traffic on IBC study area roadways and impacts the circulation system component identified in the 2015 IBC Traffic Study Update.
- The 2015 IBC Traffic Study Update identifies the additional traffic volumes generated by new IBC development.
- Project-related fair-shares developed as part of the 2015 IBC Traffic Fee Nexus Update document the proportional responsibility of the project to traffic impact funding requirements.

The fees will be used to construct the improvements that will enable the circulation system to function at acceptable levels of service in Irvine and in adjacent jurisdictions.

4.3.2 Reasonableness Between Need for the Improvements and the Type of Development on which Fee is imposed

- As the IBC continues to develop, increasing traffic will necessitate improvements throughout the study area to maintain efficient circulation.
- Without implementation of project-related improvements, the circulation system will continue to deteriorate as new development compounds traffic operations deficiencies on the roadway network.

The fee collected is based on the forecasted number of trips the proposed development will generate at buildout. The need for the improvements is based on the analysis presented in the 2015 IBC Traffic Study Update. The fee is associated directly with new development within the IBC and the number of total peak hour trips that the new development is expected to generate. As the Vision Plan area develops, fees will be collected and improvements constructed to keep pace with new development, providing a circulation system throughout the IBC that operates at an acceptable level of service.

4.3.3 Reasonableness Between Amount of the Fee and Cost of Public Good (IBC Transportation Needs) attributable to the Type of Development

- Development fees have been defined based on funding of the City of Irvine's fair-share responsibility of the Vision Plan improvements outside the City within the Vision Plan study area, and 90% of the City of Irvine's responsibility for improvements within the City of Irvine. It is assumed that outside funding sources, including federal, state and county grants, can supplement the remaining 10% of development fees to implement improvements within the City of Irvine.

- The fee is supported by all new development at a rate that reflects the relative traffic impact of that development.
- The amount of the fee is directly related to the level of development associated with each new IBC project. The calculation of the impact fee is based upon the recognition that differing types of developments generate differing amounts of trips. The fee is based on the forecasted number of peak trips generated by the proposed development projects.

The total fee includes a program administration fee. This administration fee is required to ensure that the program functions properly and the traffic improvements are implemented appropriately.

To further demonstrate reasonableness of the fees, the updated IBC Transportation fees were compared with another major activity center in Orange County, the Platinum Triangle in Anaheim, California. Table 4.1 compares traffic fees imposed on developments within the Platinum Triangle with those proposed for IBC, in this update.

Table 4.1: Traffic Fee Comparison between Platinum Triangle and IBC

Land Use	Unit	Anaheim Citywide Fee *	Platinum Triangle Supplemental Fee *	Platinum Triangle Total Fee	IBC Updated Traffic Fee **
Residential	DU	$2,029	$3,702	$5,731	$4,697
Extended Stay	Room				$3,796
Hotel	Room	$1,474		$1,474	$6,140
Retail Mix	Sq. Ft.	$5.50	$50.00	$55.50	$13.97
Office	Sq. Ft.	$3.67	$12.00	$15.67	$13.97
Industrial Mix **	Sq. Ft.	$1.42	$3.00	$4.42	$3.79
Mini-Warehouse	Sq. Ft.				$2.44

Source: HDR 2015, City of Anaheim
* City of Anaheim Fee Schedule (http://www.anaheim.net/DocumentCenter/View/202)
** Effective FY 2017-2018

5 Conclusion

This 2015 IBC Traffic Fee Nexus Update has been prepared to reiterate the "nexus" for the development fees needed to fund necessary improvements to the circulation system. The updated traffic fee rates will be effective in the upcoming FY 2017-18. As noted in the Vision Plan EIR, there are overriding considerations for jurisdictional circulation system improvements outside the City of Irvine. As these improvements are not under the City of Irvine's jurisdiction, the City cannot guarantee that these improvements are implemented. However, it is the responsibility to contribute fair-share to the improvements through traffic impact fees in order to fund the improvements within these adjacent jurisdictions. During the development of the IBC Vision Plan, the City reached agreements with Newport Beach, Tustin and Caltrans, and amended an existing agreement with Santa Ana regarding its financial responsibilities to mitigate traffic impacts in each jurisdiction due to the buildout of the Vision Plan.

Since 2010, through the agreements with the Cities of Newport Beach and Tustin, the City of Irvine paid Tustin and Newport Beach a combined amount of $8.15 million as its fair-share, and thereby, has been absolved from any future fair-share contribution provided the City does not exceed its maximum cap on residential units of 15,000 base dwelling units (plus 1,794 density bonus dwelling units pursuant to state law.) For Caltrans, the City of Irvine is obligated to provide, through IBC fee collection, a total amount of $7,025,962, when the agency proceeds with the implementation of improvements at its impacted facilities. Currently the IBC fund has earmarked $440,663 towards that payment. Based on the amended agreement with Santa Ana, the City of Irvine is obligated to contribute $52,670,912 towards three improvements in Santa Ana (widening of Dyer Road, Alton Parkway Overcrossing at SR-55, and Flower Street at Segerstrom Avenue).The agreement with Costa Mesa was not revised and the City of Irvine, through the proposed fee, will collect an amount of $28,970 to contribute towards the improvement at SR-55 Frontage Road SB Ramps at Paularino Avenue.

Based on this update, the proposed fees are significantly higher than the current 2016 fees due to several factors which include additional improvement locations, significant increases in improvement costs between 2010 and 2015, fewer number of remaining developments that will share the cost of the improvements and a lesser amount of remaining available IBC funds that can be applied towards the improvements. However, even with the increased fees, they remain about 30%-35% lower than the 2009 IBC traffic fees, in-place prior to the adoption of the Vision Plan in 2010.

Appendix C

Mitigation Monitoring and Reporting Plan
from 2010 IBC Vision Plan EIR

MITIGATION MONITORING PROGRAM

IRVINE BUSINESS

COMPLEX VISION PLAN

AND MIXED USE

OVERLAY ZONING CODE

ENVIRONMENTAL

IMPACT REPORT

SCH #2007011024



prepared for:

CITY OF IRVINE

Contact:
Bill Jacobs, AICP,
Principal Planner

prepared by:

THE PLANNING CENTER

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Environmental Services

JULY 2010

MITIGATION MONITORING PROGRAM

IRVINE BUSINESS

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COI-21.0E

JULY 2010

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1. Introduction

1.1 PURPOSE OF MITIGATION MONITORING PROGRAM

This Mitigation Monitoring Program has been developed to provide a vehicle by which to monitor mitigation measures and conditions of approval outlined in the Recirculated Draft Environmental Impact Report (RDEIR) State Clearinghouse No. 2007011024. The Mitigation Monitoring Program has been prepared in conformance with Section 21081.6 of the Public Resources Code and City of Irvine Monitoring Requirements. Section 21081.6 states:

> *(a) When making the findings required by paragraph (1) of subdivision subsection (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:*
>
> *(1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.*
>
> *(2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.*
>
> *(b) A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.*
>
> *(c) Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.*

The Mitigation Monitoring Program will serve to document compliance with adopted/certified mitigation measures which are formulated to minimize impacts associated with the construction of the proposed project.

1. Introduction

1.2 PROJECT LOCATION

The approximately 2,800-acre Irvine Business Complex (IBC) comprises Planning Area 36 in the City of Irvine, in south/central Orange County. More specifically, the IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north, the San Diego Creek channel to the east, John Wayne Airport and Campus Drive to the south and State Route 55 (SR-55) to the west. The San Diego Freeway (I-405) traverses the southern portion of the IBC, and the Santa Ana Freeway (1-5) is to the north and east. The IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north. The IBC consists of a range of industrial, office, commercial, and residential uses covering approximately 2,800 acres in the western portion of the City of Irvine. Adjacent to the IBC, on the north, is the City of Tustin and the former MCAS Tustin, currently being redeveloped with residential and commercial uses as part of the Tustin Legacy Specific Plan. A 40-acre parcel of the IBC is detached and to the south of the main IBC boundary area, and bounded by Jamboree Road, Fairchild Road, Macarthur Boulevard, and the San Joaquin Marsh, and adjacent to the City of Newport Beach. The most prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and 4,779 medium- and high density residential units and 232 density bonus units for a total of 5,011 dwelling units existing within the IBC.

1.3 PROJECT SUMMARY

As shown on Table 1-1, the IBC Vision Plan and Mixed Use Overlay Zoning Code (proposed project) would allow for an increase in total units in the IBC from 9,015 units to 15,000 units, a difference of 5,985. This increase is a reallocation of existing intensity within current intensity limitations. In addition, a total of 1,598 density bonus units, in addition to 440 existing, approved, or under construction would be allowed in accordance with state law, for a total 17,038 units. The current General Plan allows for 53,125,389 square feet of nonresidential intensity in Planning Area 36. The additional units would be offset by a reduction of 2,399,626 of office square footage and 1,602,526 of industrial square footage (for a total of 4,002,152 square feet, or 2,887,307 square feet of office equivalency). Upon adoption of the IBC Vision Plan, the total nonresidential intensity allowed by the adopted General Plan would be 48,787,662 square feet. The individual components of the proposed project are outlined in Table 1-1.

Table 1-1
IBC Development Summary

Residential					
	Existing General Plan			***Proposed Project***	
	Existing	***Under Construction***	***Approved***	***Pending[1]***	***Potential[2]***
Base Units	4,779	1,814	2,422	2,035	3,950
Density Bonus Units[3]	232	78	130	215	1,383
Subtotal	5,011	1,892	2,552	2,250	5,333
Total	**9,455**			**7,583**	
			Total Cap for the IBC	**15,000**	
			Total IBC Units at Buildout including Density Bonus	**17,038**	

Nonresidential			
	Existing General Plan		***Proposed Project***
	Existing Development	***Remaining Buildout Potential***	***Remaining Buildout Potential***
Nonresidential Square Footage	42,771,000	10,354,389	6,016,662
Total Nonresidential	**53,125,389**		**48,787,662**

Hotel Rooms			
	Existing General Plan		***Proposed Project***
	Existing Development	***Remaining Buildout Potential***	***Remaining Buildout Potential***
	2,496	610	372
Total Hotel Rooms	**3,106**		**3,478**

[1] Pending units are those for which development applications are currently on file with the City.
[2] Potential units are those remaining to reach the 15,000-unit cap. No development applications have been received for these units.
[3] Density bonus units are exempt by state law from local regulatory limitations on development intensity but are included and analyzed in this DEIR.

The proposed project consists of the following components:

1.3.1 IBC Vision Plan

The IBC Vision Plan outlines the City's policies and objectives for addressing residential and mixed-use development within the IBC, to be incorporated as a new element in the City's General Plan. The framework for the IBC Vision Plan provides the land use and urban design structure by which new residential development would be organized. The IBC Vision Plan Framework would facilitate the development of high-quality, sustainable neighborhoods, and a balanced mix of uses. Several infrastructure improvements would be proposed throughout the IBC Vision Plan area. The locations of the proposed improvements, such as bridge crossings, are generalized in nature, as specific locations have not yet been evaluated in detail. The proposed bridge widenings are intended to improve pedestrian and bicycle access. No additional vehicular travel lanes are proposed.

The existing sidewalk improvement program will continue to be implemented and embellished with enhanced standards for improved walkability and connectivity to create an interconnected system of pedestrian-friendly boulevards, avenues, and streets. The program calls for the installation of sidewalks to fill the gaps in the IBC sidewalk system and provides for the installation of a five- to eight-foot-wide sidewalk behind eight feet of landscaped parkway.

The proposed project includes a new per-unit fee program to be assessed against new residential or residential mixed-use development in the IBC to fund these proposed improvements. Existing developments would be exempt from this fee program. This fee program is proposed to be adopted in conjunction with the Vision Plan and its components. A separate

fee program is also proposed to be adopted in conjunction with the Vision Plan to augment the current IBC Transportation Mitigation Fee program to reflect current mitigation.

1.3.2 IBC Districts

The IBC was originally planned as a business complex and at present there is little distinctiveness between its different areas. The IBC Vision Plan attempts to address this by creating two districts, to identify both a proposed mixed-use core and maintain a distinct core for existing businesses, each with its own unique identity and character, within the Mixed Use Overlay Zone.

Urban Neighborhood (UN)

The Urban Neighborhood District would include the mixed-use core IBC (generally between Jamboree Road and Von Karman Avenue) and allows a range of land uses and buildings at varying heights. Generally, these neighborhoods are envisioned to be primarily residential with retail, offices, and restaurants allowed on the first floor.

Business Complex (BC)

The Business Complex District would be applied to portions of the IBC characterized by existing, longstanding industrial and other commercial uses that are expected to remain. This district accommodates new industrial and other commercial uses and an expansion of existing uses.

1.3.3 Subsequent Development Pursuant to the Proposed Project

The 2,250 pending units identified in Table 1-1 include the proposed projects summarized in Table 1-2, for which applications are currently on file with the City. It is anticipated that following the certification of this RDEIR, the City will proceed with the processing of the discretionary applications associated with each of these projects, without further need for a General Plan Amendment, Zone Change, or EIR so long as the project substantially conforms to the description in this RDEIR.

Table 1-2
Summary of Pending IBC Residential Development Projects

Project Name	Location	Base Units	Density Bonus Units	Total Units
Martin Street Condos	2301 Martin Street	82	—	82
2851 Alton	Northwest corner of Alton and Murphy	170	—	170
Avalon Jamboree II	16901 Jamboree	144	35	179
Irvine Technology Center	Northwest corner of Jamboree and Campus	1,000	—	1,000
Kilroy	17150 Von Karman	347	122	469
Alton/Millikan Apartments	16952 Millikan	126	30	156
2852 Kelvin	2852 Kelvin	166	28	194
	Total	**2,035**	**215**	**2,250**

1.3.4 General Plan Amendment

The General Plan Amendment would incorporate Vision Plan policies and objectives into a new General Plan Element and establish a cap of 15,000 dwelling units for the IBC area (excluding density bonus units granted pursuant to state law), with a corresponding reduction of nonresidential office equivalency square footage in Table A-1, Maximum Intensity Standards by Planning Area, of the City's General Plan, to accommodate future units under the cap that have not yet been approved. As described on Table 1-1, the General Plan/Zoning cap for the IBC is currently set at 9,015

residential units; therefore, a unit cap of 15,000 units would create potential for 5,985 additional dwelling units (of which 2,035 are pending) in the IBC beyond those already existing or approved. The details (location, timing, density, and design) of 3,950 potential units are unknown because there are no currently pending applications. In addition to the 15,000-unit cap, this RDEIR and related traffic study address the potential for 2,038 additional density bonus units, listed below, which are excluded from local intensity limitations by state law:

- 232 existing (built) density bonus units
- 208 density bonus units approved or under construction
- 215 known density bonus units from pending projects
- A theoretical maximum of 1,383 density bonus units, assuming the remaining 3,950 units are built with a maximum allowable additional density bonus of 35 percent

The current General Plan allows for 53,125,389 square feet of overall nonresidential development in Planning Area 36, which may vary according to the totals of individual land uses over time. The total 5,985 additional new units (either potential or in process) remaining under the 15,000-unit cap would be offset by a reduction of 4,337,727 square feet of nonresidential intensity square feet. With the additional nonresidential land use optimization discussed in this DEIR, the overall nonresidential intensity in the General Plan would be 48,787,662 square feet, with the reduction resulting primarily from the conversion of higher quantities of older industrial square footage to lower quantities of office square footage. Construction of the 1,892 units in process, along with the pending and approved nonresidential projects, are assumed to be completed by 2015. The remaining 3,950 units, along with the proposed nonresidential land use optimization, would be completed at City buildout, post-2030. The General Plan Amendment would also add new policy language to the current Land Use Element text and add the IBC Vision Plan framework as a new Land Use Element Figure A-3 (IBC) to incorporate the IBC Vision Plan.

As a part of General Plan Amendment, the existing IBC density cap of 52 dwelling units per acre would be removed from the Land Use Element Table A-1 and a minimum of 30 units per acre would be added as a density level. As a result, future residential projects would not have a restriction on maximum density, but would have to comply with a minimum density of 30 units per acre to ensure the benefit of higher-density housing necessary to establish a vibrant mixed-use community.

1.3.5 Zoning Ordinance Amendment

The Zoning Ordinance Amendment would add new Chapter 5-8 to adopt the IBC Mixed Use Overlay Zone, which would define regulatory zoning districts for properties within the IBC and outline a process for analysis of compatibility of residential development with adjacent businesses. The amendment would also revise the statistical analysis outlined in Section 9-36-5, Statistical Analysis, of the City's Zoning Ordinance, to establish a residential cap of 15,000 dwelling units for the IBC area (excluding density bonus units pursuant to state law), with an offsetting reduction of nonresidential square footage, for units under the cap not yet approved, consistent with the proposed General Plan Amendment. Furthermore, the amendment would also update the Chapter 9-36, Planning Area 36 (Irvine Business Complex), provisions regarding the IBC traffic mitigation fee program. This amendment would also include clarifications of code language relating to Transfer of Development Rights (TDR). The Zoning Ordinance Amendment would also include other minor amendments to other sections of zoning code to maintain internal consistency.

1.3.6 Municipal Code Amendment

The Municipal Code Amendment would revise Chapter 10, Dedications, of Division 5, Subdivisions, of the City's Municipal Code, by adding a section to incorporate new urban park standards into the City's park dedication requirements for the IBC. The City's Park Standards Manual would also be updated to address urban open space in the

IBC. Section 5-5-1004D(1) will also be revised to remove a 50-unit per acre density cap for determining persons per household..

1.3.6.1 Design Criteria

To ensure a consistent standard of residential design quality throughout the IBC, a set of design criteria from the IBC Vision Plan that would be applicable to residential and residential mixed-use projects in the IBC would be adopted. These criteria are intended to guide the physical development of any residential or mixed-use project that contains a component of residential use within the boundaries of the IBC. They are intended to assist in ensuring that the design of each development remains true to the principles established in the IBC Vision Plan. The criteria would also provide standards and criteria for new construction and for remodels or additions. The new design criteria would only be applicable to residential and mixed-use development.

1.3.6.2 Amendments to the City's Circulation Element

The City of Irvine General Plan Circulation Element identifies certain roadway configurations that are no longer needed as determined in the IBC Vision Plan; therefore a General Plan Amendment subsequent to the approval of the IBC Vision EIR will downgrade arterial roadways as needed. The City of Irvine intends to downgrade the following arterial segments as a subsequent General Plan Amendment to the Circulation Element:

- Barranca Parkway between Red Hill Avenue and Jamboree Road (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Jamboree Road between Barranca Parkway and McGaw Avenue (downgrade from a 10-lane divided roadway to a 8-lane divided roadway)
- Main Street between Red Hill and Harvard (downgrade from 6-lane divided arterial with 2 auxiliary lanes to 6-lane divided roadway)
- MacArthur Boulevard between Fitch and Main Street (downgrade from 8-lane divided roadway to 7-lane divided roadway)
- Red Hill Avenue between Barranca Parkway and Main Street (downgrade from an 8-lane divided roadway to a 6-lane roadway)
- Alton Parkway between Red Hill Avenue and Jamboree Road (downgrade from a 6-lane divided roadway to 4-lane divided roadway)
- Von Karman Avenue between Barranca Parkway and Michelson (downgrade from 6-lane roadway to 4-lane roadway)

The arterial segment of Alton Parkway between Red Hill Avenue and Jamboree Road as well as the segment of Von Karman Avenue between Barranca Parkway and Michelson Drive are programmed into both the City of Irvine's General Plan and the Orange County Master Plan of Arterial Highways (MPAH). Both roadways are currently 4-lane roadways and expected to remain as 4-lane roadways in the future. Both the City's General Plan and the Orange County MPAH currently have these two segments programmed as 6-lane divided arterials in the buildout condition. The IBC Vision Plan traffic study has determined that 6 lanes are unnecessary for both of these roadway segments under buildout conditions. Thus, the City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with the Orange County Transportation Authority (OCTA) to determine the feasibility of downgrading both Alton Parkway and Von Karman Avenue. In order for the City of Irvine to maintain eligibility for Measure M funding, prior to amending the City's General Plan to downgrade both Alton Parkway between Red Hill Avenue and Jamboree Road and Von Karman

Avenue between Barranca Parkway and Michelson Drive, the City and OCTA will work to prepare amendments to the County MPAH to be approved by the OCTA Board of Directors. If the MPAH is approved by the OCTA Board, the City can move forward with downgrading the arterial segments.

Additionally, the City of Irvine intends to remove the following interchange improvements:

- Alton Parkway overcrossing at the SR-55 freeway with High Occupancy Vehicle (HOV) drop ramps
- Von Karman Avenue at the I-405 freeway HOV drop ramps

These interchange improvements are programmed in the Orange County MPAH as buildout improvements. However, the IBC Vision Plan traffic study has determined that these interchanges are unnecessary under buildout conditions. The City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with OCTA and the affected local agencies to determine the feasibility of removing these interchange improvements from the MPAH.

1.3.7 Additional Changes

The name of the IBC may also be changed as directed by the Irvine City Council. Although not required under CEQA, it is included for informational purposes.

1.4 ENVIRONMENTAL IMPACTS

The City of Irvine determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) and Initial Study on January 8, 2007, to the State Clearinghouse, responsible agencies, and interested parties. Comments received during the January 8, 2007, through February 22, 2007, NOP review period are also contained in Appendix A. The project description was subsequently revised to reduce the number of dwelling units and project details were refined. A new NOP was circulated between September 19, 2008, and October 20, 2008.

1.4.1 Impacts Considered Less Than Significant

The following environmental topical sections were found to be less in the Initial Study.

- Agricultural Resources
- Mineral Resources

1.4.2 Potentially Significant Adverse Impacts That Can Be Mitigated, Avoided, or Substantially Lessened

The following have been identified as potentially resulting in significant adverse impacts that can be mitigated, avoided, or substantially lessened:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services

- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Global Climate Change

1.4.3 Unavoidable Significant Adverse Impacts

The DEIR identifies three significant and unavoidable adverse impacts, as defined by CEQA that would result from implementation of the proposed project:

- Air Quality
- Noise
- Transportation and Traffic

2. Mitigation Monitoring Process

2.1 MITIGATION MONITORING AGREEMENT

The Mitigation Monitoring Agreement will be provided through the City conditions of approval process, and reference compliance with this monitoring program.

Provisions are included in the Agreement specifying monitoring and reporting requirements, scheduling, qualifications of mitigation monitors and specialists, agency fees, right of site access, dispute resolution, and penalties. The Agreement will include enforcement provisions and sanctions for more severe infractions, such as stop work orders, loss of further entitlement or restoration. The landowner would agree that the agency has the right to impose these sanctions pursuant to the contract and hold the agency harmless in enforcement of its provisions.

The lead agency may also require that Mitigation Monitoring Agreements be executed between the landowner and appropriate responsible or trustee agencies.

The use of Mitigation Monitoring Agreements will clarify the assignment of responsibility, and have the added benefit of improving the citizenry's confidence that agencies are committed to take actions to protect their environment.

2.2 MITIGATION MONITORING PROGRAM ORGANIZATION

Overall mitigation monitoring program management is the responsibility of the City of Irvine Community Development Department. The Mitigation Monitoring Committee—composed of the landowner, construction manager, and the environmental monitor—is responsible for program implementation and reporting requirements. The technical consultants (EIR consultant, geologist/environmental assessor, project engineer, noise consultant, and traffic consultant) will perform related monitoring tasks under the direction of the environmental monitor (if contracted by the City).

In the event of disputes regarding matters for which the City is the final authority, The Director of Community Development will be final arbiter in the event of a dispute.

2.3 CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT

The City of Irvine Community Development Department will serve as the program administrator, responsible for overall program management, mitigation monitoring clearances and coordination of the arbitration committee/responsible agencies, and the mitigation monitoring committee. The Department is responsible for review of all monitoring reports, enforcement actions, and document disposition.

2.4 MITIGATION MONITORING COMMITTEE

The mitigation monitoring committee is responsible for the day-to-day monitoring activities and reporting, and includes a representative from the landowner, construction manager, and the mitigation monitor. The monitoring committee holds regularly scheduled meetings to coordinate mitigation measure implementation, review compliance reports, and resolve in-field disputes. Unresolved disputes are forwarded to the arbitration committee.

2.5 MITIGATION MONITORING TEAM

The mitigation monitoring team, consisting of the environmental monitor manager and technical subconsultants (EIR consultant, geologist/environmental assessor, project engineer, biologist, noise consultant, traffic consultant, and archaeologist), is responsible for monitoring the implementation/ compliance with all adopted mitigation measures and conditions of approval. A major portion of the team's work is in-field monitoring and compliance report preparation. Implementation disputes are brought to the committee for resolution by the monitor, and if required, to the arbitration committee.

2. Mitigation Monitoring Process

The following summarizes key positions in the monitoring program and their respective functions:

Monitoring Team

- **Technical Advisors:** Responsible for monitoring in respective areas of expertise (EIR consultant, geologist/environmental assessor, project engineer, noise consultant, and traffic consultant). Directly reports to the environmental monitor.

- **Monitoring Committee:** Responsible for report review, and first phase of dispute resolution.

- **Irvine Community Development Department:** Principal manager of the monitoring program. Responsible for coordination of mitigation monitoring committee, technical consultants, report preparation, and dispute resolution. Responsible for overall program administration, participation on arbitration committee and document/report clearinghouse.

- **Irvine Department of Public Works:** Responsible for review of final engineering plans in conformance with the Tentative maps, technical support, and compliance report preparation.

- **City Council:** Responsible for implementation of corrective action, stop work orders and final arbitrator of disputes.

2.6 RECOGNIZED EXPERTS

The use of recognized experts, as a component of the monitoring team and arbitration committee, is required to ensure compliance with scientific and engineering based mitigation measures. While the mitigation monitoring teams recognized experts assess compliance with required mitigation measures, responsible agency recognized experts consult with the arbitration committee regarding disputes.

2.7 ARBITRATION/DISPUTE RESOLUTION

If the mitigation monitor identifies a mitigation measure which, in the opinion of the monitor, has not been implemented, or has not been implemented correctly, the problem will be brought for resolution before the mitigation monitoring committee for resolution. If the problem cannot be satisfactorily resolved by the committee, it will be brought before the Director of Community Development for resolution. The decision of the Director of Community Development is final, unless appealed to the Director or Planning Commission. The Director of Community Development, acting through a final vote of the City Council, will have the authority to issue stop work orders until the dispute is resolved. In the case of situations involving potential risk of safety or other emergency conditions, the Director of Community Development is empowered to issue temporary stop work orders until such time as Planning Commission or City Council review of the particular stop work matter becomes final.

2.8 ENFORCEMENT

Public agencies may enforce conditions of approval through their existing police power, using stop work orders, fines, infraction citations, loss of entitlement, refusal to issue building permits or certificates of use and occupancy, or, in some cases, notice of violation for tax purposes. Criminal misdemeanor sanctions could be available where the agency has adopted an ordinance requiring compliance with the monitoring program, similar to the provision in many zoning ordinances which state the enforcement power to bring suit against violators of the ordinance's provisions.

Additional enforcement provisions could include required posting of a bond or other acceptable security in the amount of the required mitigation measures. In the event of non-compliance, the City could call the bond and complete the required mitigation measures.

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3. Mitigation Monitoring Requirements

3.1 PRE-MITIGATION MEETING

A pre-monitoring meeting will be scheduled to review mitigation measures, implementation requirements, schedule conformance, and mitigation monitoring committee responsibilities. Committee rules are established, and the entire mitigation monitoring program is presented and any misunderstandings resolved.

3.2 CATEGORIZED MITIGATION MEASURES/MATRIX

Project-specific design features, existing plans, policies, and procedures, and mitigation measures have been categorized in matrix format, as shown in Table 3-1. As shown, the matrix identifies the environmental factor, specific mitigation measures, project design features, and existing plans, policies, and procedures, schedule, and monitor. The mitigation matrix will serve as the basis for scheduling the implementation of, and compliance with, all mitigation measures, project design features, and existing plans, policies, and procedures.

3.3 DATA BASE MANAGEMENT

All mitigation monitoring reports, letters, memos, shall be prepared utilizing Microsoft Word software on IBM compatible PC (currently in use by the Irvine Community Development Department).

3.4 COORDINATION WITH CONTRACTORS

The construction manager is responsible for coordination of contractors, and is responsible for contractor completion of required mitigation measures.

3.5 LONG-TERM MONITORING

Long-term monitoring relating to several mitigation measures may be required.

3. Mitigation Monitoring Requirements

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Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
5.1 AESTHETICS				
Existing Plans, Programs and Policies				
Prior to the issuance of building permits	PPP 1-1	**City of Irvine Zoning Ordinance Chapter 3-16- Lighting:** As required by Chapter 3-16, Lighting, of the City's Zoning Ordinance, outdoor lighting shall be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. The level of lighting on the site shall comply with the requirements of the City's Uniform Security Code.	Community Development Department	
Prior to the issuance of building permits	PPP 1-2	**City of Irvine Standard Condition 3.6:** Prior to the issuance of building permits, the applicant shall demonstrate, through the submittal of an electrical engineer's photometric survey, prepared to the satisfaction of the Director of Community Development, that lighting requirements as set forth in the Irvine Uniform Security Code (Irvine Municipal Code, Title 5, Division 9, Chapter 5) are met.	Community Development Department	
Project Design Features				
Prior to the issuance of building permits	PDF 1-1	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.1:** For specific development projects that are proposing high-rise office or residential uses within 100 feet of the San Joaquin Freshwater Marsh or the San Diego Creek, in order to minimize the frequency of birds flying into the building surface, the project applicant shall reduce the reflectivity of building surface materials by using angles that are not highly reflective, or through the incorporation of building surface materials that reduce reflectivity.	Community Development Department	
5.2 AIR QUALITY				
Existing Plans, Programs and Policies				
Prior to the issuance of grading permits	PPP 2-1	**SCAQMD Rule 201 – Permit to Construct:** The SCAQMD requires developers who build, install, or replace any equipment or agricultural permit unit, which may cause new emissions of or reduce, eliminate, or control emissions of air contaminants to obtain a permit to construct from the Executive Officer.	South Coast Air Quality Management District	
Prior to the issuance of grading permits	PPP 2-2	**SCAQMD Rule 402 – Nuisance Odors**: The SCAQMD prohibits the discharge of any quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property to be emitted within the South Coast Air Basin (SoCAB).	South Coast Air Quality Management District	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	PPP 2-3	**SCAQMD Rule 403 – Fugitive Dust (PM_{10} and $PM_{2.5}$):** The SCAQMD prohibits any person to cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that: (a) the dust remains visible in the atmosphere beyond the property line of the emission source; or (b) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook) if the dust emission is the result of movement of a motorized vehicle.	South Coast Air Quality Management District consultation with the Construction Contractor	
Prior to the issuance of grading permits and during construction activities	PPP 2-4	**SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities**: This rule specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.	South Coast Air Quality Management District consultation with the Construction Contractor	
Project Design Features				
Prior to the issuance of building permits	PDF 2-1	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.f:** As described in the proposed zoning for the project and based on the recommended buffer distances of the California Air Resources Board, for all residential or residential mixed-use projects within the distances to industrial uses outlined below, the Project Applicant shall submit a health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD) to the Community Development Director prior to approval of any future discretionary residential or residential mixed use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units: • 1,000 feet from the truck bays of an existing distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units, or where transport refrigeration unit operations exceed 300 hours per week. • 1,000 feet from an existing chrome plating facility or facility that uses hexavalent chromium. • 300 feet from a dry cleaning facility using perchloroethylene using one machine and 500 feet from a dry cleaning facility using perchloroethylene using two machines. • 50 feet from gas pumps within a gas-dispensing facility and 300 feet from gas pumps within a	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		gasoline-dispensing facility with a throughput of 3.6 million gallons per year or greater.		
Prior to the issuance of building permits	PDF 2-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.e:** As described in the proposed zoning for the project, applicants for new residential developments in the Irvine Business Complex within 500 feet of Interstate 405 shall be required to install high efficiency Minimum Efficiency Reporting Value (MERV) filters of MERV 10 or better in the intake of residential ventilation systems. A MERV 10 filter creates more resistance to airflow because the filter media becomes denser as efficiency increases. Heating, air conditioning and ventilation (HVAC) systems shall be installed with a fan unit power designed to force air through the MERV 10 filter. To ensure long-term maintenance and replacement of the MERV 10 filters in the individual units, the following shall occur: a) Developer, sale, and/or rental representative shall provide notification to all affected tenants/residents of the potential health risk from I-405 for all affected units. b) For rental units within 500 feet of the I-405, the owner/property manager shall maintain and replace MERV 10 filters in accordance with the manufacture's recommendations. The property owner shall inform renters of increased risk of exposure to diesel particulates from I-405 or SR-55 when windows are open. c) For residential owned units within 500 feet of I-405, the Homeowner's Association (HOA) shall incorporate requirements for long-term maintenance in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV 10 filter in accordance with the manufacturer's recommendations. The HOA shall inform homeowner's of increased risk of exposure to diesel particulates from I-405 when windows are open.	Community Development Department	
Prior to the issuance of building permits	PDF 2-3	**City of Irvine IBC Design Criteria Section 2.0.B** As described in the proposed design criteria for the project, all outdoor active-use public recreational areas associated with development projects shall be located more than 500 feet from the nearest lane of traffic on the Interstate 405.	Community Development Department	
Prior to the issuance of grading permits and during construction activities	PDF 2-4	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.g:** For all residential projects located within 1,000 feet of an industrial facility which emits toxic air contaminants, the Project Applicant shall submit a health risk assessment prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District to the Community Development Director prior to approval of any future discretionary residential or mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to,	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value filters rated at 10 or better at all residential units.		
Prior to the issuance of grading permits and during construction activities	PDF 2-5	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.h.:** For all residential projects located within 1,000 feet of an industrial facility that emits substantial odors, which includes but is not limited to: • wastewater treatment plants • composting, greenwaste, or recycling facilities • fiberglass manufacturing facilities • painting/coating operations • coffee roasters • food processing facilities, The Project Applicant shall submit an odor assessment to the Community Development Director prior to approval of any future discretionary action that verifies that the South Coast Air Quality Management District (SCAQMD) has not received three or more verified odor complaints. If the Odor Assessment identifies that the facility has received three such complaints, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential odors to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 10 or better at all residential units.	Community Development Department	
Prior to the issuance of grading permits and during construction activities	***Exhaust*** PDF 2-6	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.a and 9-36-20.3:** Applicants for new developments in the Irvine Business Complex shall require that the construction contractor utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities. Use of commercially available Tier 3 or higher off-road equipment, or: • year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater;	Community Development Department in consultation with the Construction Contractor	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		• year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and • 2008 and newer construction equipment for engines rated equal to or greater than 50 hp The use of such equipment shall be stated on all grading plans. The construction contractor shall maintain a list of all operating equipment in use on the project site. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site.		
Prior to the issuance of grading permits and during construction activities	PDF 2-7	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.b:** Applicants for new developments in the Irvine Business Complex shall require that the construction contractor to properly service and maintain construction equipment in accordance with the manufacturer's recommendations. Nonessential idling of construction equipment shall be restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.	Community Development Department in consultation with the Construction Contractor	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	***Fugitive Dust*** PDF 2-8 **SCAQMD Rule 403 – Fugitive Dust (PM_{10} and $PM_{2.5}$), City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.c:** Applicants for new developments in the Irvine Business Complex shall require that the construction contractor prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District Rule 403 to further reduce PM10 and PM2.5 emissions. To assure compliance, the City shall verify compliance that these measures have been implemented during normal construction site inspections: • During all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering. This would achieve a minimum control efficiency for PM_{10} of 5 percent. • During all construction activities, the construction contractor shall sweep streets with Rule 1186 compliant PM_{10}-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling. • During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means. This would achieve a control efficiency for PM_{10} of 91 percent. • During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day. This would achieve an emissions reduction control efficiency for PM_{10} of 61 percent. • During all construction activities, the construction contractor shall limit on-site vehicle speeds on unpaved roads to no more than 15 miles per hour. This would achieve a control efficiency for PM_{10} of 57 percent. • The construction contractor shall apply chemical soil stabilizers to reduce wind erosion. This would achieve a control efficiency of up to 80 percent.	Community Development Department in consultation with the Construction Contractor	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits and during construction activities	***Architectural Coatings*** PDF 2-9	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.d:** Applicants for new developments in the Irvine Business Complex shall require that the construction contractor use coatings and solvents with a volatile organic compound (VOC) content lower than required under Rule 1113 (i.e., Super Compliant Paints). All architectural coatings shall be applied either by (1) using a high-volume, low-pressure spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precoated/natural colored building, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans.	Community Development Department in consultation with the Construction Contractor	
5.3 BIOLOGICAL RESOURCES				
Existing Plans, Programs and Policies				
Prior to the issuance of grading permits	PPP 3-1	**U.S. Clean Water Act, Section 404:** Prior to any installation of any new storm drain connections to and/or discharges into the San Diego Creek or San Joaquin Marsh, the City or other project applicants shall 1) obtain a permit or other authorization from the US Army Corps of Engineers pursuant to Section 404 of the Clean Water Act; 2) obtain a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region, pursuant to Section 401 of the federal Clean Water Act, which requires any applicant for a federal permit, such as a Clean Water Act Section 404 permit, to provide the licensing agency a certification from the California Regional Water Quality Control Board that the project will comply with adopted water quality standards; and 3) provide notification to the California Department of Fish and Game (CDFG) of the project pursuant to Section 16-2 of the Fish and Game Code and comply with any further actions required by CDFG.	US Army Corps of Engineers (Section 404 Permit), Santa Ana Regional Water Quality Control Board (Section 401 Permit), California Department of Fish and Game (Section 16-2)	
Prior to issuance of grading permits	PPP 3-2	**City of Irvine Municipal Code Section 5-7-410(c):** If any trees are removed, the Applicant shall carry out a tree survey and obtain a permit for their removal in accordance with the City's tree preservation ordinance (including 1:1 replacement).	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Project Design Features				
Prior to approval of the design for the San Diego Creek Trail improvements/extension	PDF 3-1	**City of Irvine Zoning Ordinance Chapter 5-8-4.D.2.a:** Prior to approval of the design for the San Diego Creek Trail improvements/extension, the City shall examine alternative locations of the proposed trail and methods that could be used to minimize potential impacts (e.g., fencing and buffers). The design shall consider an alternative that excludes a trail segment along the most sensitive part of San Diego Creek (the northwestern side of the creek between Campus Drive and MacArthur Boulevard).	Community Development Department	
Prior to issuance of grading permits	PDF 3-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.D.2.b:** Prior to issuance of grading permits for the San Diego Creek Trail, a note shall be placed on all grading plans that construction activities involving the use of heavy equipment are prohibited during the bird nesting season (March 15 to September 15). If minor construction activities are carried out during the bird nesting season, a qualified biologist shall conduct a preconstruction survey in the off-site habitat to determine the location of any active bird nests in the area, including but not limited to raptors and least Bell's vireo. The survey should begin not more than three days prior to the beginning of construction activities. The wildlife agencies shall be notified if any nesting least Bell's vireo are found. During construction, active nesting sites shall be monitored to ensure that construction levels do not exceed 60 dBA L_{eq}. Should these noise levels be exceeded, the City shall implement noise attenuation measures, potentially including the erection of temporary noise curtains sufficient to reduce noise levels at occupied nesting sites to acceptable levels. Nest monitoring should continue until fledglings have dispersed or the nest has been determined to be a failure, as approved by the wildlife agencies.	Community Development Department	
Prior to issuance of building permits	PDF 3-3	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.1.a:** Prior to issuance of building permits for high-rise buildings within 100 feet of the San Joaquin Marsh or San Diego Creek, the project applicant shall demonstrate that architectural plans prohibit the use of highly reflective glass widows, and utilize angles that are not highly reflective in order to reduce light and glare impacts on the marsh and creek environment and to reduce the incidence of bird collisions, to the satisfaction of the Community Development Director.	Community Development Department	
Prior to approval of final landscape plans for areas located within 100 feet of the San Joaquin Marsh or San Diego Creek	PDF 3-4	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.1.b:** Prior to approval of final landscape plans for areas located within 100 feet of the San Joaquin Marsh or San Diego Creek, the project applicant shall ensure that development landscaping does not include exotic plant species that may be invasive to native habitats. Exotic plant species not to be used include those species listed on Lists A and B of the California Invasive Plant Council's (Cal-IPC) list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999." A copy of the complete list can be obtained from Cal-IPC's web site at http://www.cal-ipc.org.	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
5.4 CULTURAL RESOURCES				
Existing Plans, Programs and Policies				
Prior to the issuance of the first preliminary or precise grading permits	PPP 4-1	**City of Irvine Modified Standard Condition 2.5:** Prior to the issuance of the first preliminary or precise grading permits for each planning area, and for any subsequent permit involving excavation to increased depth, the applicant shall provide letters documenting retention of an archaeologist and a paleontologist for the project. The letters shall state that the applicant has retained these individuals, and that the consultants will be on call during all grading and other significant ground-disturbing activities. These consultants shall be selected from the roll of qualified archaeologists and paleontologists maintained by the County of Orange. The archaeologist and/or paleontologist shall meet with Community Development staff, and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the project site. Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect these resources. Unanticipated discoveries shall be evaluated for significance by an Orange County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers. Persons performing this work shall be Orange County Certified Professional Archaeologists/Paleontologists.	Community Development Department, Archaeologist/ Paleontologist, and Construction Contractor	
Prior to issuance of grading permits	PPP 4-2	**City of Irvine Modified Standard Condition 2.5:** In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, one of the following steps shall be taken: a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of,	Public Works Department and Archaeologist/ Paleontologist	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. b. Where the following conditions occur, the land owner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the property in a location not subject to further subsurface disturbance: • The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission. • The identified descendent fails to make a recommendation; or • The landowner or his/her authorized representative rejects the recommendation of the descendent, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner. (CEQA Guidelines Section 15064.5[e])		
5.5 GEOLOGY AND SOILS				
Existing Plans, Programs and Policies				
On-going during grading	PPP 5-1	**City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual:** Revegetation of cut and fill slopes shall be required in accordance with the City of Irvine Grading Code and Grading Manual.	Public Works Department and Construction Contractor	
On-going during grading	PPP 5-2	**City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual:** All grading operations and construction will be conducted in conformance with the applicable City of Irvine Grading Code and Grading Manual, the most recent version of the California Building Code, and consistent with the recommendations included in the most current geotechnical reports for the project area prepared by the engineer of record.	Public Works Department and Construction Contractor	
Prior to issuance of grading permits	PPP 5-3	**City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual:** In accordance with the City of Irvine Grading Code and Grading Manual, detailed geotechnical investigation reports for each Rough Grading Plan shall be submitted to further evaluate faults, subsidence, slope stability, settlement, foundations, grading constraints, liquefaction potential, issues related to shallow groundwater, and other soil engineering design conditions and provide site-specific recommendations to mitigate these issues/hazards. The geotechnical reports shall be prepared and signed/stamped by a Registered Civil Engineer specializing in geotechnical engineering and a Certified Engineering Geologist. The City of Irvine Geotechnical Engineer/Engineering Geologist	Public Works Department, Construction Contractor, and Geotechnical Consultant	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		shall review the rough grading plan to ensure conformance with recommendations contained in the reports.		
On-going during grading	PPP 5-4	**City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual:** In accordance with the City of Irvine Grading Code and Grading Manual, grading and earthwork shall be performed under the observation of a Registered Civil Engineer specializing in Geotechnical Engineering in order to achieve proper subgrade preparation, selection of satisfactory fill materials, placement and compaction of structural fill, stability of finished slopes, design of buttress fills, subdrain installation, and incorporation of data supplied by the engineering geologist.	Public Works Department , Construction Contractor, and Civil Engineer	
On-going during grading	PPP 5-5	**City of Irvine Municipal Code Title 5, Division 10 and City Grading Manual:** In accordance with the City of Irvine Grading Code and Grading Manual, grading and earthwork shall also be performed under the observation of a Certified Engineering Geologist to provide professional review and written approval of the adequacy of natural ground for receiving fills, the stability of cut slopes with respect to geological matters, and the need for subdrains or other groundwater drainage devices. The geologist shall geologically map the exposed earth units during grading to verify the anticipated conditions, and if necessary, provide findings to the geotechnical engineer for possible design modifications.	Public Works Department, Construction Contractor, and Engineering Geologist	
Prior to issuance of building permits	PPP 5-6	**City of Irvine Building Code and the most recent Uniform Building Code and/or California Building Code**: Future buildings and structures (e.g., houses, retaining walls) shall be designed in accordance with the City of Irvine Building Code and the most recent Uniform Building Code and/or California Building Code. The concrete utilized shall take into account the corrosion and soluble sulfate soil conditions at the site. The structures shall be designed in accordance with the seismic parameters included in the UBC/CBC.	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
5.6 HAZARDS AND HAZARDOUS MATERIALS				
Existing Plans, Programs and Policies				
Prior to issuance of grading permits	PPP 6-1	**California Health and Safety Code, Sections 25280 through 25299:** If any underground storage tanks (USTs) are encountered during site grading and excavation activities, they shall be removed in accordance with the existing standards and regulations of, and oversight by, the Orange County Health Care Agency (OCHCA), based on compliance authority granted through the California Code of Regulations, Title 23, Division 3, Chapter 16, Underground Tank Regulations. The process for UST removal is detailed in the OCHCA's "Underground Storage Tanks: The Basics." Soil samples from areas where storage tanks have been removed or where soil contamination is suspected shall be analyzed for hydrocarbons including gasoline and diesel in accordance with procedures set forth by OCHCA. If hydrocarbons are identified in the soil, the appropriate response/remedial measures will be implemented as directed by OCHCA with support review from the RWQCB until all specified requirements are satisfied and a Tank Closure Letter is issued. Any aboveground storage tank (AST) in existence at the commencement of site development shall be removed in accordance with all applicable regulations under the oversight of Orange County Fire Authority. Compliance requirements relative to the removal/closure of storage tanks are set forth through the California Health and Safety Code, Sections 25280 through 25299.	Orange County Health Care Agency (OCHCA)	
During demolition, grading, and excavation	PPP 6-2	**California Code of Regulations Section 1532.1, California Health and Safety Code:** During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.	Public Works Department and Construction Contractor	
Prior to approval of a conditional use permit	PPP 6-3	**OCFA Guideline B-09 (Fire Master Plans for Commercial and Residential Development):** Prior to approval of a conditional use permit, project applicants shall prepare a Fire Master Plan for submittal to the Orange County Fire Authority (OCFA) consistent with OCFA Guideline B-09 (Fire Master Plans for Commercial and Residential Development).	Community Development Department and Orange County Fire Authority	
Prior to issuance of demolition permits and during demolition activities	PPP 6-4	**Rule 29, Code of Federal Regulations (CFR) Part 1926, California Code of Regulations, Title 17, Division 1, Chapter 8:** Federal law requires compliance with Rule 29 of the Code of Federal Regulations (CFR) Part 1926. Prior to site demolition activities, building materials shall be carefully assessed for the presence of lead-based paint, and its removal, where necessary, must comply with state and federal regulations, including Occupational Safety and Health Administration (OSHA) 29	Public Works Department and Construction Contractor	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		CFR Part 1926. The OSHA rule establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation of monitoring. Furthermore, the requirements of California Code of Regulations, Title 17, Division 1, Chapter 8, identify procedures that must be followed for accreditation, certification, and work practices for lead-based paint and lead hazards. Section 36100 thereof specifically sets forth requirements for lead-based paint abatement in public and residential buildings.		
Prior to issuance of demolition permits and during demolition activities	PPP 6-5	**SCAQMD Rule 1403 –** Prior to site demolition activities, building materials must be carefully assessed for the presence of asbestos-containing materials (ACM), and removal of this material, where necessary, must comply with state and federal regulations, including SCAQMD Rule 1403, which specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACMs. The requirements for demolition and renovation activities include asbestos surveying; notification; ACM removal procedures and time schedules; ACM handling and cleanup procedures; and storage, disposal, and landfill disposal requirements for asbestos-containing waste materials.	Public Works Department and Construction Contractor	
During site decommissioning and demolition activities	PPP 6-6	**Title 22, Division 4.5 of the California Code of Regulations:** During site decommissioning and demolition activities, hazardous wastes must be managed in accordance with the requirements of Title 22, Division 4.5 of the California Code of Regulations. Title 22 sets forth the requirements with which hazardous-waste generators, transporters, and owners or operators of treatment, storage, or disposal facilities must comply. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste such as the requirements for transporting shipments of hazardous waste, manifesting, vehicle registration, and emergency accidental discharges during transportation.	Public Works Department	
During demolition, grading, and excavation	PPP 6-7	**California Code of Regulations, Section 1529:** During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Project Design Features				
Prior to issuance of building permits	PDF 6-1	**City of Irvine Zoning Ordinance Chapter 5-8-4.C.1** As described in the proposed zoning for the project, building height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be provided per Airport Environs Land Use Plan for John Wayne Airport.	Community Development Department	
Prior to issuance of building permits	PDF 6-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.3:** As described in the proposed zoning related to residential disclosures, all discretionary applications for residential or residential mixed use shall include a condition of approval for disclosure to residents clearly outlining the issues associated with living in a mixed-use environment. The language for this disclosure shall be as specified by the Community Development Director. Copies of each signed disclosure shall be made available for review upon written request by the City.	Community Development Department	
During site decommissioning and demolition activities	PDF 6-3	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.6** As described in the proposed zoning code related to hazardous material standards, individual development sites may have existing facilities, such as transformers or clarifiers, that would be demolished as part of a proposed development. To mitigate any hazardous-materials-related impacts during the removal of such facilities, the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process for the proposed development.	Community Development Department and Orange County Fire Authority	
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 6-4	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.2:** As required by the proposed zoning code, applications for new residential and/or residential mixed-use development shall submit data to the Director of Community Development, to evaluate compatibility with surrounding uses with respect to issues including but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, soil/groundwater contamination, heliports/helistops and John Wayne Airport compatibility. Structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1 Notice of Proposed Construction or Alternation with Federal Aviation Administration. Residential land uses shall be prohibited in Safety Zone 3.	Community Development Department	
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 6-5	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.4.g:** For all residential projects located within 1,000 feet of an industrial facility which emits toxic air contaminants, the Project Applicant shall submit a health risk assessment prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District to the Community Development Director prior to approval of any future discretionary residential or mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		one hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value filters rated at 10 or better at all residential units.		
Included in adopted zone change	PDF 6-6	Residential development shall not be permitted within a one-parcel buffer surrounding the property at 17451 Von Karman, based on existing parcelization as of the date of the certification of the Environmental Impact Report. The area within the one parcel buffer is depicted in Figure 1 in the City of Irvine Zoning Code Chapter 5-8.		
5.7 HYDROLOGY AND WATER QUALITY				
Existing Plans, Programs and Policies				
Prior to the issuance of precise grading permit	PPP 7-1	**City Standard Condition A.6:** Prior to the issuance of precise grading permits, the applicant shall submit a hydrology and hydraulic analysis of the entire site. The analysis shall be prepared by a professional civil engineer versed in flood control analysis and shall include the following information and analysis: a. Hydrology/hydraulic analysis of 100-year surface water elevation at the project site to determine building elevation or flood proofing elevation. b. Analysis of existing and postdevelopment peak 100-year storm flow rates, including mitigation measures to reduce peak flows to existing conditions. c. An analysis demonstrating that the volume of water ponded on the site and stored underground in the drainage system outside of the building envelope in the proposed condition is greater than or equal to the corresponding volume in the existing condition. The water surface used to determine the ponded volume shall be based on the water surface in the major flood control facility that the site is tributary to.	Public Works Department	
Prior to the issuance of precise grading permit	PPP 7-2	**City Standard Condition 2.2:** Prior to the issuance of precise grading permits, the applicant shall submit a groundwater survey of the entire site. The analysis shall be prepared by a geotechnical engineer versed in groundwater analysis and shall include the following information and analysis:	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		a. Potential for perched groundwater intrusion into the shallow groundwater zone upon build-out. b. Analysis for relief of groundwater buildup and properties of soil materials on-site. c. Impact of groundwater potential on building and structural foundations. d. Proposed mitigation to avoid potential for groundwater intrusion within five feet of the bottom of the footings.		
Prior to the issuance of preliminary or precise grading permits	PPP 7-3	**City Standard Condition 2.12:** This project will result in soil disturbance of one or more acres of land that has not been addressed by an underlying subdivision map. Prior to the issuance of preliminary or precise grading permits, the applicant shall provide the City Engineer with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed:	Public Works Department	
Prior to the issuance of preliminary or precise grading permits	PPP 7-4	**City Standard Condition 2.13:** Prior to the issuance of precise grading permits, the applicant shall submit, and the Director of Community Development shall have approved, a project water quality management plan (WQMP). The WQMP shall identify the best management practices that will be used on the site to control predictable pollutant runoff.	Community Development Department	
5.9 LAND USE AND PLANNING				
Project Design Features				
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PDF 8-1	**IBC Design Criteria:** To ensure a consistent standard of residential mixed-use design quality throughout the IBC, the City of Irvine has established a set of Residential Mixed-Use Design Criteria. These Design Criteria are intended to guide the physical development of any residential or mixed-use project that contains a component of residential use located within the boundaries of the IBC. This document establishes the framework through which design continuity can be achieved while accommodating varying tastes, materials, and building methods. It provides standards and criteria for new construction and for remodels or additions.	Community Development Department	
In conjunction with submittal of a development application (e.g., Conditional Use	PDF 8-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.2:** As described in the proposed zoning code relating to compatibility with surrounding uses, the IBC mixed-use environment is an urbanized area, and land use compatibility issues are expected to occur. Therefore, applications for new residential and/or residential mixed-use development shall submit data, as determined by the Director of	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Permit)		Community Development, for the City to evaluate compatibility with surrounding uses with respect to issues including, but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination.		
5.9 NOISE				
Existing Plans, Programs and Policies				
On-going during construction	PPP 9-1	**City of Irvine Municipal Code Section 6-8-205(a), Control of Construction Hours:** Construction activities occurring as part of the project shall be subject to the limitations and requirements of Section 6-8-205(a) of the Irvine Municipal Code which states that construction activities may occur between 7:00 AM and 7:00 PM Mondays through Fridays, and 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or his or her authorized representative. Trucks, vehicles, and equipment that are making, or are involved with, material deliveries, loading, or transfer of materials, equipment service, maintenance of any devices or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the City. Any waiver granted shall take impact upon the community into consideration. No construction activity will be permitted outside of these hours except in emergencies including maintenance work on the City rights-of-way that might be required.	Public Works Department	
Prior to issuance of building permits	PPP 9-2	**City Standard Condition 3.5:** Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the applicant shall submit a final acoustical report prepared to the satisfaction of the Director of Community Development. The report shall show that the development will be sound attenuated against present and projected noise levels, including roadway, aircraft, helicopter and railroad, to meet City interior and exterior noise standards. The final acoustical report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). In order to demonstrate that all mitigation measures have been incorporated into the project, the report shall be accompanied by a list identifying the sheet(s) of the building plans that include the approved mitigation measures	Director of Community Development	
Project Design Features				
Prior to issuance of grading permits and on-going through construction activities	***Construction***		Community Development Department and Construction Contractor	
	PDF 9-1	**City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.b:** As described in the proposed zoning for the project, applicants for individual projects that involve vibration-intensive construction activities, such		

Table 3-1
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Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	as pile drivers, jack hammers, and vibratory rollers, occurring near sensitive receptors shall submit a noise vibration analysis prior to their application being deemed complete by the City. If construction-related vibration is determined to exceed the Federal Transit Administration vibration-annoyance criteria of 78 VdB during the daytime, additional requirements, such as use of less vibration intensive equipment or construction techniques shall be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver).		
Prior to issuance of grading permits and on-going through construction activities	PDF 9-2 **City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.a:** Prior to issuance of grading permits, the project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved. • Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer's standards. • Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development. • The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, whenever feasible. • Construction of sound walls that have been incorporated into the project design prior to construction of the building foundation; or installation of temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with adsorbent inner insulation) placed along the boundary of the project site during construction activities.	Community Development Department and Construction Contractor	
Prior to issuance of certificate of occupancy	***Noise Compatibility*** PDF 9-3 **City of Irvine Zoning Ordinance Chapter 5-8-4.A.5.c:** As described in the proposed zoning for the project, prior to issuance of certificate of occupancy, the project applicant shall submit evidence to the satisfaction of the Director of Community Development that occupancy disclosure notices for units with patios and/or balconies that do not meet the 65 dBA CNEL are provided to all future tenants pursuant to the City's Noise Ordinance.	Community Development Department	
Prior to issuance of building permits	PDF 9-4 **City of Irvine Zoning Ordinance Chapter 5-8-4.C:** As described in the proposed zoning for the project, residential and active recreational areas shall be prohibited in the 65 dBA CNEL noise contour of the John Wayne Airport. In addition, as described in the proposed zoning for the project, prior to issuance of building permits, the project applicant for any project within the 60 dBA CNEL contour of the John Wayne Airport shall retain an acoustical engineer to prepare an acoustic analysis that identifies required building acoustical improvements (e.g., sound transmission class	Director of Community Development	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		rated windows, doors, and attic baffling) to achieve the 45 dBA CNEL interior noise standard of Title 21 and Title 24 of the California Building Code. In addition to the 24-hour interior noise standard, the acoustic report shall detail compliance with the City's interior noise standard of 55 dBA L_{max} (10) for single-event noise generated by the loudest 10 percent of aircraft overflights at the John Wayne Airport. Parks within the 60 dBA CNEL noise contour shall include signage indicating their proximity to John Wayne Airport and related airport noise. The acoustic analysis shall be submitted to the Director of Community Development to ensure compliance.		
5.10 POPULATION AND HOUSING				
Existing Plans, Programs and Policies				
On-going	PPP 10-1	**City of Irvine Housing Element:** Compliance with the City's Housing Element policies, which provide a strategic blueprint to ensure the siting of new very low, low, and moderate income housing units in future development projects to help the City continue to meet its state fair share housing requirements.	Community Development Department	
5.11 PUBLIC SERVICES				
Fire Protection and Emergency Services				
Existing Plans, Programs and Policies				
On-going	PPP 11-1	**Orange County Fire Authority Rules and Regulations:** Every project applicant shall comply with all applicable Orange County Fire Authority codes, ordinances, and standard conditions regarding fire prevention and suppression measures relating to water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems.	Community Development Department	
Prior to the issuance of the preliminary grading permits	PPP 11-2	**Orange County Fire Authority Rules and Regulations:** Prior to the issuance of the first grading permit for the individual development within the IBC, the applicant shall have executed a Secured Fire Protection Agreement with the Orange County Fire Authority	Community Development Department	
Prior to issuance of building permits	PPP-11-3	**Orange County Fire Authority Rules and Regulations:** Prior to the issuance of the first building permit, all fire protection access easements shall be approved by the Orange County Fire Authority and irrevocably dedicated in perpetuity to the City	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Project Design Features				
Prior to issuance of building permits	PDF 11-1	**IBC Infrastructure Improvement Program:** Installation of an Opticom traffic light control system at signalized intersections through the proposed IBC Infrastructure Improvement Program.	Public Works Department	
Prior to issuance of building permits	PDF 11-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.B.2.c:** A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates within the project area.	Community Development Department	
Police Protection				
Existing Plans, Programs and Policies				
In conjunction with submittal of a development application (e.g., Conditional Use Permit)	PPP 11-5	**City of Irvine Municipal Code Title 5, Division 9, Chapter 5:** The project applicant shall comply with all applicable requirements of the City of Irvine Uniform Security Code	Community Development Department	
Project Design Features				
In conjunction with submittal of a development application (e.g., CUP)	PDF 11-2	**City of Irvine Zoning Ordinance Chapter 5-8-4.B.1.b:** Utilize the concepts of Crime Prevention Through Environmental Design in the design and layout of any project to reduce criminal opportunity and calls for service, as specified in the proposed zoning code.	Community Development Department	
School Services				
Existing Plans, Programs and Policies				
Prior to certificate of occupancy to the issuance of building permits	PPP 11-6	**California Government Code Section 65995:** Pursuant to Government Code Section 65995, the individual applicants shall pay developer fees to the appropriate school districts at the time building permits are issued; payment of the adopted fees would provide full and complete mitigation of school impacts. Alternatively, the applicant may enter into a school finance agreement with the school district(s) to address mitigation to school impacts in lieu of payment of developer fees. The	Community Development Department and School District	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		agreement shall establish financing mechanisms for funding facilities to serve the students from the project. If the applicant and the affected school district(s) do not reach a mutually satisfying agreement, then project impacts would be subject to developer fees.		
Library Services				
Project Design Features				
Prior to the issuance of building permits	PDF 11-3	**City of Irvine Zoning Ordinance Chapter 5-8-4.D.1:** In the event that a Citywide library impact fee is adopted and in force, each developer shall pay this fee prior to issuance of building permits for new development.	Community Development Department	
5.12 RECREATION				
Existing Plans, Programs and Policies				
Prior to the issuance of building permits	PPP 12-1	**City of Irvine Municipal Code Section 5-5-1004.E.2:** All park fees shall be paid directly to the City cashier prior to issuance of any residential building permits for the building site or sites from which fees are to be derived. These fees are to be used only for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision.	Community Development Department	
Prior to the issuance of preliminary or precise grading permits	PPP 12-2	**City Standard Conditions 2.1, 2.16:** This development includes public trails as identified in the City's General Plan. Prior to the issuance of the first preliminary or precise grading permit, an irrevocable offer of dedication for the nonexclusive easements for public use of any public trails shall be recorded. Improvements and dedication of public trails shall be subject to the approval of the Director of Community Services	Community Development Department	
5.13 TRAFFIC AND CIRCULATION				
Existing Plans, Programs and Policies				
Prior to the issuance of building permits	PPP 13-1	**IBC Development Fee Program:** A Development Fee program was established to fund area-wide circulation improvements within the IBC area. The improvements are required due to potential circulation impacts associated with buildout of the IBC area. Fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. The development fees collected are used strictly for circulation improvements right-of-way acquisition and transportation monitoring measures in the IBC area. Fees are calculated by multiplying the proposed square footage, dwelling unit or hotel room by the appropriate rate. The IBC Fees are included with any other applicable fees	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		payable at the time the building permit is issued.		
Project Design Features				
Ongoing	PDF 13-1	**City of Irvine Zoning Code Chapter 9-36-21, Transportation Management Association:** The City shall pursue formation of a Transportation Management Association (TMA) for the Irvine Business Complex. The goals and objectives of the TMA are as follows: • Monitor travel demand at employment sites and provide reports on trip generation to the City of Irvine. • Offer employers and property owners assistance with transportation services on a voluntary basis. • Deliver transportation services to commuters. Services include: a. Provide ridematching, transit and Metrolink information b. Inform commuters of incentives that may be available from public agencies c. Formation of vanpools • Represent the IBC in local transportation matters • Oversee and fund the implementation and expansion of **The *i* Shuttle**, a clean fuel rubber tire shuttle system.	Public Works Department	
Mitigation Measures				
Prior to the issuance of the first building permit	MM 13-1	Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall prepare a "nexus" study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq, for the Irvine Business Complex to support General Plan and Zoning changes under consideration for the Irvine Business Complex Vision Plan. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. The following traffic improvements and facilities are necessary to mitigate project impacts and shall be included, among other improvements, in the AB 1600 nexus study: **Costa Mesa** Intersection #12: SR-55 Southbound Frontage Road at Baker Street: Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane.	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	Restripe the eastbound approach to two through lanes and a shared through right turn lane. Intersection #13: SR-55 Northbound Frontage Road at Baker Street: Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound defacto right turn lane. Addition of second southbound left-turn lanes. **Irvine** Intersection #141: Jamboree Road and Main Street: Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane. Intersection #188: Harvard Avenue and Michelson Drive: Add a second southbound left turn lane. Intersection #232: Culver Drive and I-405 Northbound Ramps: Restripe the westbound approach of this intersection to one left turn lane and two right-turn lanes. Intersection #136: Jamboree Road and Barranca Parkway: Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane. **Newport Beach** Intersection #62: Campus Drive at Bristol Street NB: In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban		

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs	Responsible for Monitoring	Date Completed
	Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport. Intersection #85: MacArthur Boulevard and Birch Street: Improve the eastbound approach to two eastbound left-turn lanes and two eastbound through lanes. **Santa Ana** Intersection #543 Bristol Street and Segerstrom Avenue: Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of Santa Ana to determine the most appropriate future improvement at this location. • Alternative 1: Add 3rd eastbound through and westbound through lanes on Segerstrom Avenue • Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street Intersection #723 Main Street and Dyer Road (Segerstrom): Add a third northbound through lane and a defacto northbound right-turn lane. Intersection #730 Grand Avenue and Warner Avenue: Add a third westbound through lane. Arterial #1884 MacArthur Blvd. from Main Street to SR-55 Widen from 6 to 8 Lanes **Tustin** Intersection #24: Newport Avenue and Walnut Avenue: Add a defacto westbound right turn lane and defacto northbound right turn lane.		

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		Intersection #93: Tustin Ranch Road and El Camino Real: Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane. Intersection #134: Loop Road/Park Avenue at Warner Avenue: Add a third eastbound through lane. Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street: This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.		
Prior to the issuance of the first building permit	MM 13-2	Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall update the IBC Development Fee program pursuant to the AB 1600 Nexus Study identified in Mitigation Measure 5.13-1. The IBC Development Fee program was established to fund area-wide circulation improvements within the IBC and adjoining areas. The improvements are required due to potential circulation impacts associated with buildout of the IBC. Fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. The development fees collected are applied toward circulation improvements and right-of-way acquisition in the IBC and adjoining areas. Fees are calculated by multiplying the proposed square footage, dwelling unit or hotel room by the appropriate rate. The IBC Fees are included with any other applicable fees payable at the time the building permit is issued. The City will use the IBC development fees to, among other things, fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified in Mitigation Measure 5.13-1.	Public Works Department	
Prior to the issuance of the first building permit	MM 13-3	Prior to issuance of the first building permit pursuant to the proposed project, the City shall update the Irvine Business Complex Land Use and Trip Monitoring Data base (IBC Database) to reflect the land use changes associated with the proposed project. The City maintains this database for tracking development intensity within the IBC. This data base is an important tool to help ensure the circulation system serving the IBC area is adequate and to ensure roadway improvements are provided at the appropriate time. The data base tracks the amount of square footage built (Existing),	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		the available square footage (Additional Zoning Potential and/or Remaining Approval) and the maximum amount of square footage allocated (Total Development Potential and/or Buildout + Existing) to each parcel within the IBC.		
Prior to adoption of the AB 1600 nexus study identified in MM 13-1	MM 13-4	Prior to adoption of the AB 1600 nexus study identified in MM 13-1, the City and Caltrans shall jointly identify feasible operational and physical improvements and the associated fair-share funding contribution necessary to mitigate project-related impacts to state transportation facilities. The City shall fund said improvements on pro-rata "fair-share" basis in accordance with the terms and conditions of an Agreement to be prepared and agreed to by both agencies. These fair-share contributions for feasible improvements shall be included in the AB 1600 nexus study	Public Works Department	
5.14 UTILITIES AND SERVICE SYSTEMS				
Water Service				
Existing Plans, Programs and Policies				
Prior to the issuance of grading permits	PPP 14-1	**IRWD Rules and Regulations, Requirement to Use Recycled Water**: Irvine Ranch Water District (IRWD) will identify customers in a zone identified in the Plan ("the Plan" collectively refers to the Water Resources Master Plan, Sewer Master Plan, Natural Treatment System Master Plan, and addenda thereto) as an area capable of receiving service from the IRWD's recycled water system, and will determine the feasibility of providing recycled water service to these customers. IRWD will also review applications for new permits to determine the feasibility of providing recycled water service to these applicants. If recycled water service is determined by IRWD to be feasible, applicants for new water service shall be required to install on-site facilities to accommodate both potable water and recycled water service in accordance with these Rules and Regulations. IRWD may also require existing customers to retrofit existing on-site water service facilities to accommodate recycled water service. If IRWD does not require the use of recycled water service, the customer may obtain recycled water service upon request but only if IRWD has determined that recycled water service to the customer is feasible and authorizes such use.	Irvine Ranch Water District	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Prior to the issuance of grading permits	PPP 14-2	**IRWD Rules and Regulations, Connection Fees**: Future project applicants in the IBC shall enter into agreement or agreements as necessary with IRWD to establish the appropriate financial fair share costs to be borne by the project proponent. Fair share costs may include, but are not limited to, those associated with the preparation of studies and infrastructure expansion necessary to analyze and serve the project.	Irvine Ranch Water District	
Prior to the issuance of grading permits	PPP 14-3	**IRWD Rules and Regulations, Fire Flow Analysis:** In accordance with IRWD requirements, each redevelopment project in the IBC must provide a fire flow analysis. If the analysis identifies any deficiencies, the developer will be responsible for any water system improvements associated with the development project required to rectify the deficiencies and meet IRWD fire flow requirements.	Public Works Department	
Sewer Services				
Existing Plans, Programs and Policies				
	Refer to PPP 14-2 above.			
Solid Waste				
Existing Plans, Programs and Policies				
Prior to the issuance of precise grading permits	PPP 14-4	**City of Irvine Standard Condition 3.7:** This project will result in new construction that will generate solid waste. Prior to the issuance of precise grading permits, the applicant shall show on the site plans the location of receptacle(s) to accumulate on-site-generated solid waste for recycling purposes. At the discretion of the Director of Community Development the developer of a nonresidential project may be permitted to contract with a waste recycler for off-site materials recovery. In this case the applicant must provide a letter verifying that recycling will be conducted off site in an acceptable manner	Community Development Department	
Utility Demands				
Existing Plans, Programs and Policies				
Prior to the issuance of building permits	PPP 14-5	**2008 Building and Energy Efficiency Standards (CCR Title 24):):** The proposed project shall comply with all State Energy Insulation Standards and City of Irvine codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy efficient building standards, including ventilation, insulation and construction and the use of energy saving appliances, conditioning systems, water	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		heating, and lighting.) Plans submitted for building permits shall include written notes demonstrating compliance with energy standards and shall be reviewed and approved by the Public Utilities Department prior to issuance of building permits.		
5.15 GLOBAL CLIMATE CHANGE				
Existing Plans, Programs and Policies				
During construction and demolition	PPP 15-1	**City of Irvine Municipal Code Title 6 Division 7, Construction and Demolition (C&D) Debris Recycling and Reuse:** The Construction and Demolition (C&D) ordinance requires that 1) all residential projects of more than one unit, 2) nonresidential developments on 5,000 square feet or larger, and 3) nonresidential demolition/renovations with more than 10,000 square feet of building recycle or reuse a minimum of 75 percent of concrete and asphalt and 50 percent of nonhazardous debris generated.	Community Development Department	
Prior to the issuance of building permits for residential, commercial, or office structures	PPP 15-2	**2008 Building and Energy Efficiency Standards (CCR Title 24):** Prior to the issuance of a building permit for residential, commercial, or office structures in the Irvine Business Complex, development plans for these structures shall be required to demonstrate that the project meets the 2008 Building and Energy Efficiency Standards. Commonly known as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2008 standards are approximately 15 percent more energy efficient than the 2005 Building and Energy Efficiency Standards. Plans submitted for building permits shall include written notes demonstrating compliance with the 2008 energy standards and shall be reviewed and approved by the Public Utilities Department prior to issuance of building permits. Design strategies to meet this standard may include maximizing solar orientation for daylighting and passive heating/cooling, installing appropriate shading devices and landscaping, utilizing natural ventilation, and installing cool roofs. Other techniques include installing insulation (high R value) and radiant heat barriers, low-e window glazing, or double-paned windows.	Community Development Department	
During design and construction of projects approved for development in the IBC	PPP 15-3	**Title 24 Code Cycles: Net-Zero Buildings (Residential & Non-Residential):** The California Public Utilities Commission adopted its Long-Term Energy Efficiency Strategic Plan on September 18, 2008, presenting a roadmap for all new residential and commercial construction to achieve a zero-net energy standard. This Plan outlines the goal of reaching zero net energy in residential construction by 2020 and in commercial construction by 2030. Achieving this goal will require increased stringency in each code cycle of California's Energy Code (Title 24).	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Ongoing	PPP 15-4	**California SB 107 Renewable Portfolio Standard:** CARB's Renewable Portfolio Standard (RPS) is a foundational element of the State's emissions reduction plan. In 2002, Senate Bill 1078 established the California RPS program, requiring 20 percent renewable energy by 2017. In 2006, Senate Bill 107 advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II. On September 15, 2009, Governor Arnold Schwarzenegger signed Executive Order S-21-09 directing CARB to adopt regulations increasing RPS to 33 percent by 2020. These mandates apply directly to investor-owned utilities, in this case Southern California Edison (SCE).	Community Development Department	
Ongoing	PPP 15-5	**California Exec Order S-1-07 Low Carbon Fuel Standard:** On January 18, 2007, Governor Arnold Schwarzenegger issued Executive Order S-1-07 requiring the establishment of a Low Carbon Fuel Standard (LCFS) for transportation fuels. This statewide goal requires that California's transportation fuels reduce their carbon intensity by at least 10 percent by 2020. Regulatory proceedings and implementation of the LCFS have been directed to CARB. The LCFS has been identified by CARB as a discrete early action item in the Scoping Plan. CARB expects the LCFS to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Scoping Plan work in tandem with one another. To avoid the potential for double-counting emission reductions associated with AB 1493 (Pavley), the Scoping Plan has modified the aggregate reduction expected from the LCFS to 9.1 percent.	Community Development Department	
Ongoing	PPP 15-6	**Federal Corporate Average Fuel Economy (CAFE) Standards:** The 2007 Energy Bill creates new federal requirements for increases in fleetwide fuel economy for passenger vehicles and light trucks. The federal legislation requires a fleetwide average of 35 miles per gallon (mpg) to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase in requirements to achieve this goal. Analysis by CARB suggests that this will require an annual improvement of approximately 3.4 percent between 2008 and 2020.	Community Development Department	
Ongoing	PPP 15-7	**California Assembly Bill 1493 – Pavley Standards:** On July 22, 2002, Governor Gray Davis signed Assembly Bill 1493 requiring CARB to develop and adopt regulations designed to reduce greenhouse gases emitted by passenger vehicles and light-duty trucks beginning with the 2009 model year. The standards set within the Pavley regulations are expected to reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016. California had petitioned the USEPA in December 2005 to allow these more stringent standards and California executive agencies have repeated their commitment to higher mileage standards. On July 1, 2009, the USEPA granted California a waiver that will enable the state to enforce stricter tailpipe	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		emissions on new motor vehicles.		
Ongoing	PPP 15-8	**California SB 375:** SB 375 requires the reduction of GHG emissions from light trucks and automobiles through land use and transportation efforts that will reduce vehicle miles traveled (VMT). In essence, SB 375's goal is to control GHGs by curbing urban sprawl and through better land use planning. SB 375 essentially becomes the land use contribution to the GHG reduction requirements of AB 32, California's global warming bill enacted in 2006. The proposed project is consistent with SB 375 strategies to reduce VMT and associated GHG emissions in that it represents a compact, mixed-use development, improves jobs/housing balance in the City and Orange County Council of Governments Subregion, and provides access to mass transit. According to the 2008 Regional Comprehensive Plan, SCAG's Land Use and Housing Action Plan can be expected to result in a 10 percent reduction in VMT in 2035 when compared to current trends.	Community Development Department	
Ongoing	PPP 15-9	**Transit Service to LAX:** Although the City of Irvine is serviced by John Wayne Airport, Los Angeles International Airport (LAX) is the regional air transportation hub. Providing direct transit service from the City to LAX can reduce single passenger trips to this destination. The Los Angeles World Airports operates three Flyaway shuttles that provide nonstop airport service to and from Westwood, Van Nuys, and Downtown Los Angeles via the Flyaway program. Since November 16, 2009, a Flyaway shuttle from the Irvine Metrolink Station to LAX provides nonstop service. Based on the ITAM model, a 0.25 percent reduction in VMT is achieved through implementation of this program.	Community Development Department	
Ongoing	PPP 15-10	**Comprehensive Signal Retiming and Coordination Program:** Emissions are highest at the lowest travel speeds. The City is currently retiming and coordinating signals throughout Irvine under its ITEMS (Irvine Traffic Engineering System) program. The City plans to enhance signal coordination in the IBC area by the end of 2011. A program to retime and coordinate traffic signals would produce more even traffic flows, so that vehicles are not staring and stopping constantly. These types of programs can improve vehicular level of service (LOS), thereby decreasing emissions for the same volume of vehicles. Based on the ITAM model, a 1 percent citywide reduction in VMT is achieved through implementation of this program.	Public Works Department	
Ongoing	PPP 15-11	**Additional Fixed Route Shuttle System to Complement The *i* Shuttle:** In March 2008, the City introduced **The *i* Shuttle** service, which complements regional bus service and provides direct express transportation to and from the nearby Tustin Metrolink Station, John Wayne Airport, and throughout the IBC. **The *i* Shuttle** currently operates 12 fully accessible, compressed natural gas (CNG) buses and is funded by the City of Irvine and the Orange County Transportation Authority. The City's shuttle system has the potential to further decrease VMT in the City by encouraging	Public Works Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		employees not living in the IBC to commute to work using mass transit. Fehr & Peers is currently preparing a comprehensive study of additional local shuttles designed to complement the existing fixed route bus service operated by OCTA and the existing **The *i* Shuttle**. This report (Irvine Transit Vision, June 2009) identified six new shuttle routes for within the City of Irvine that would connect from either the Irvine Metrolink Station or the Tustin Metrolink Station to various destinations in Irvine. The City will provide additional shuttle service using the Irvine Transit Vision as a guide.		
Ongoing	PPP 15-12	**Energy Efficient Traffic Lights:** New traffic signals installed within the Irvine Business Complex will have light emitting diodes. The City is implementing a program to convert all traffic lights in the City to traffic light emitting diodes.	Public Works Department	
Ongoing	PPP 15-13	**California AB 939 Waste Reduction:** The City adopted a Zero Waste program in 2007 to approach waste management. The City recovers approximately 66 percent of its waste for recycling and composting, which exceeds the state's AB 939 waste diversion goals. Furthermore, waste haulers establish rate schedules according to bin size and frequency of collection. Commercial customers that subscribe to smaller bins (e.g., 2 cubic-yard bins) are routinely charged less by haulers. This pricing structure encourages waste reduction and recycling, and tends to minimize hauler pickups.	Public Works Department	
Ongoing	PPP 15-14	**City of Irvine Renewable Energy and Existing Buildings Retrofit Program**: Pursuant to City Council Resolution 09-52, the City has received federal funding from the U.S. Department of Energy to establish a Renewable Energy and Existing Retrofit Program. Retrofitting is designed to improve a building's energy consumption by using cost-effective measures that do not require extensive remodeling work. The City of Irvine is proposing to use the "whole building approach" meaning that the City will look at the following: • Thermal envelope (i.e. the shell insulation and air leakage) • Mechanical systems (i.e. HVAC and domestic hot water) • Appliances and lighting that may need replacing The approach will evaluate these areas and their interaction given usage rates, building site, and climate to assess the building's overall energy efficiency and performance and to make targeted recommendations for improvement and ultimately reduce residential demand. The City of Irvine will create a financing district to help property owners finance energy efficiency improvements and renewable energy installations. The City of Irvine is forming a Property Assessed Clean Energy (PACE) District under the Mello-Roos Community Facilities Act of 1982 and its powers as a charter city. Eligible improvements may include energy efficiency, water conservation, and renewable	Community Development Department	

Table 3-1
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Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		energy improvements to privately owned buildings or property. Potential funding for initial improvements may come from various sources including American Recovery and Reinvestment Act grants, taxable bonded indebtedness, other external financing arrangements, or City funds.		
Ongoing	PPP 15-15	**Safe Route to Schools:** The Safe Routes to School program is a federal and state grant program intended to increase the percentage of students walking or cycling to school. Funding is awarded to cities to construct engineering improvements and to start educational, encouragement, and enforcement programs. The City of Irvine has been successful in obtaining grant funding to implement a citywide program that includes walking school buses—groups of students who meet at a designated location and walk to school together, with a parent at the front and back of the group. This encourages students to walk to school and assuages parents' fears of traffic and crime safety risks that are impediments to walking alone. Based on the ITAM model, a 0.2 percent reduction in VMT is achieved through implementation of this program.	Public Works Department	
Ongoing	PPP 15-16	**Circulation Phasing Analysis:** The amount of emissions increase exponentially as arterial travel speeds decrease. As is the case with many cities in Southern California, there are often defined congestion locations (such as the major intersections along Jamboree Road) where a majority of congestion and delay occurs. The City currently has a Circulation Phasing Analysis program in place. They collect traffic counts at congested locations on a bi-annual basis and monitor locations every three years. The results of the analysis are used to determine future Capital Improvement Projects.	Public Works Department	
Project Design Features				
During preparation of construction bids for, and construction of, new developments	PDF 15-1	**City of Irvine Zoning Code Chapter 9-36-20.1, Alternate Transportation Incentives:** As described in the proposed zoning for the project, applicants for new developments in the Irvine Business Complex shall require that the construction contractor provide alternative transportation mode incentives such as bus passes and/or carpooling for workers to and from the worksite on days that construction activities require 200 or more workers. These requirements shall be noted on the grading plan cover sheet.	Community Development Department	
During design of new developments	PDF 15-2	**City of Irvine Zoning Code Chapter 9-36-20.2, Recycled Materials:** As described in the proposed zoning for the project, applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development or the Director of Public Works that the project uses recycled materials for at least 20 percent of construction materials. Recycled materials may include salvaged, reused, and recycled content materials. Recycled and/or salvaged building materials shall be shown on building plans and product cut sheets submitted to the	Community Development Department	

Table 3-1
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Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		City.		
Ongoing	PDF 15-3	**City General Plan Element N, Compact/Mixed-Use Development:** The California Energy Commission (CEC) considers compact development forms beneficial for minimizing energy consumption that leads to greenhouse gas emissions. In fact, the CEC's report on the connections between land use and climate change identifies density as the project feature most predictive of the number of vehicle trips and VMT by project occupants. The project locates additional housing opportunities near major employment and transportation centers. On a regional basis, this Land Use PDF will reduce regional VMT.	Community Development Department	
Ongoing	PDF 15-4	**City General Plan Element N, High Rate of Internal Trip Capture:** With the inclusion of a mix of land uses including office, commercial, industrial, and residential in the project area, the proposed project significantly reduces trips outside the project area. This reduces trip length and congestion on the local circulation system outside the project area.	Community Development Department	
Ongoing	PDF 15-5	**City of Irvine Zoning Code Chapter 9-36-20.7, Office/Commercial Development Heat Island Standards:** New parking lots serving retail and office developments shall include tree plantings designed to result in 50 percent shading of parking lot surface areas within 15 years. These shading requirements shall apply to all impervious surfaces on which a vehicle can drive, including parking stalls, driveways, and maneuvering areas within parking areas. Commercial developments shall provide landscapes with drought-resistant species and groundcovers, rather than pavement, to reduce heat reflection. Additionally: 1) Buildings are encouraged to be oriented to the south or southwest, where feasible; 2) deciduous trees are encouraged to be planted on the west and south sides of structures.	Community Development Department	
Ongoing	PDF 15-6	**City General Plan Element N, Urban Infill Near Multiple Transit Modes:** The project would develop high-density housing in an area being served by at least two modes of transit. On March 31, 2008, **The *i* Shuttle**, which is operated by the City of Irvine and designed for the IBC community, began operating. The shuttle allows residents and employees to have an alternative way to commute to jobs and locations throughout the IBC. The shuttle offers three routes to accommodate residents and employees traveling within the area and to and from the IBC (see Figure 4-2, *The i Shuttle Route*). Route A connects the Tustin Metrolink Station to the John Wayne Airport via Von Karman Avenue. Route B connects the Tustin Metrolink Station to the heart of the IBC via Jamboree Road and Michelson Drive. Route C is a midday service in the busiest section of the IBC. Therefore, the project would facilitate walking and nonmotor travel to a greater extent than would be the case for similar development in outlying areas without extensive transit availability. In addition, the high-	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
		density development would include a greater number of potential residents that could use or engage in alternative modes of travel than in a lower density development on the project site.		
During design and operation of new commercial, office, and retail developments	PDF 15-7	**City of Irvine Zoning Code Chapter 9-36-21, Transportation Management Association (TMA):** The City anticipates establishment of a TMA for the IBC by Spring 2010. Based on the ITAM model, establishment of the TMA for the IBC Vision Plan area would result in a reduction of 8 percent of projected VMT.	Community Development Department	
Ongoing	PDF 15-8	**Pedestrian Improvements:** The IBC Vision Plan creates funding mechanisms to provide for the implementation of community-orientated pedestrian infrastructure improvements to increase walkability. New streets incorporated into the IBC would reduce the size of the city blocks to a pedestrian scale and pedestrian paseos would connect to the arterials at key locations. In addition, many of the streets in the IBC currently do not have sidewalks. The sidewalk improvement program would be expanded to provide connectivity, and incorporate several new pedestrian bridges, and many existing sidewalks would be moved away from the curb into the setback area. The Creekwalk system is also envisioned adjacent to the San Diego Creek to provide a trail to connect the Great Park from the IBC and the Civic Center.	Public Works Department	
Ongoing	PDF 15-9	**City General Plan Element N, Bicycle Improvements:** The IBC would provide linkages to the City regional bicycle trail system. Currently continuous on-street bicycle lanes exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman Avenue, Michelson Avenue, Carlson Avenue, Barranca Parkway, and Alton Parkway. Furthermore, the sidewalk system would be shared between pedestrians and bicycles. As part of the Vision Plan, bicycle connections to the San Marco Park, adjacent to the San Diego Creek, would be improved with a new pedestrian bridge. Also refer to PDF 13-1 and PDF 15-7, which allow for creation of a Transportation Management Association (TMA) for the IBC area.	Public Works Department	
Prior to issuance of building permits	PDF 15-10	**City of Irvine Zoning Code Chapter 9-36-20.4: Ultra-Low-Flow Fixtures:** Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow water fixtures that exceed the Uniform Plumbing Code. Examples are: 1.28 average gallons per flush high efficiency toilets, 2 gallon per minute (gpm) efficient bathroom faucets, 2.2 gpm efficient kitchen faucets, and 2.2 gpm efficient shower heads.	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Prior to issuance of building permits	PDF 15-11	**City of Irvine Zoning Code Chapter 9-36-20.5: Landscaping and Irrigation Systems:** Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that landscaping irrigation systems installed in the project are automated, high-efficient irrigation systems that reduce water use, such as an evapotranspiration "smart" weather-based irrigation controller, dual piping for recycled water, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. These features will make the project consistent with the intent of the California Water Conservation in Landscaping Act of 2006 (AB 1881), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.	Community Development Department	
Ongoing	PDF 15-12	**City of Irvine Zoning Code Chapter 9-36-20.6: Use of Reclaimed Water on All Master Landscaped Areas:** If recycled water service is determined by IRWD to be feasible (see PPP 14-1), applicants for new developments in the Irvine Business Complex shall use reclaimed water in all master landscaped areas. This will include master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes will also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.	Irvine Ranch Water District	
Ongoing	PDF 15-13	**City of Irvine Zoning Code Chapter 9-36-20.8: Material Recovery:** To reduce waste generated in the IBC and encourage recycling of solid wastes, the Orange County Integrated Waste Management Department operates material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. On-site recycling facilities will be required for all commercial, retail, industrial, and multifamily residential developments.	Community Development Department	
Prior to issuance of building permits	PDF 15-14	**City of Irvine Zoning Code Chapter 5-8-4.A.7: GreenPoint Rated Residential Buildings:** Applicants for new residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to be GreenPoint Rated. GreenPoint Rated developments must achieve a minimum of 50 total points and meet the category-specific point thresholds as specified in the current GreenPoint Rated Builder Handbook. Developments that exceed this minimum are rewarded by a higher grade on their projects. The GreenPoint Rated program is updated every three years to coincide with changes to the California Building Energy Efficiency Standards.	Community Development Department	

Table 3-1
Summary of Impacts, Existing Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), Mitigation Measures (MMs) and Level of Significance after Mitigation

Timing	PPPs, PDFs, and MMs		Responsible for Monitoring	Date Completed
Prior to issuance of building permits	PDF 15-15	**City of Irvine Zoning Code Chapter 9-36-20.9: Designed to Earn the Energy Star Non-Residential Buildings:** Applicants for new non-residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to achieve the 'Designed to Earn the Energy Star' rating. In order achieve the 'Designed to Earn the Energy Star' rating, the architect/design firm must demonstrate that the final estimate of the building's energy use corresponds to a rating of 75 or better using the US EPA's Energy Performance Rating from the Internet-based tool, Target Finder.	Community Development Department	

4. Mitigation Monitoring Reports

Mitigation monitoring reports are required to document compliance with the Mitigation Monitoring Program, and dispute arbitration enforcement resolution. Specific reports include:

- Field Check Report
- Plan Check Conformance Reports
- Implementation Compliance Report
- Arbitration/Enforcement Report

4.1 FIELD REPORTS

Field reports are required to record in-field compliance and conditions.

4.2 PLAN CHECK CONFORMANCE REPORTS

Plan check conformance reports are completed by the Community Development Department, the Department of Public Works and the mitigation monitor to evaluate final engineering compliance with mitigation measures outlined in the Final EIR.

4.3 IMPLEMENTATION COMPLIANCE REPORT (ICR)

The ICR is prepared to document the implementation of mitigation measures on a phased basis and is shown in Table 3-1. The report summarizes implementation compliance including mitigation measures and date completed.

4. Mitigation Monitoring Reports

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CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE UPDATED IRVINE BUSINESS COMPLEX (PA 36) TRANSPORTATION MITIGATION PROGRAM, INCLUDING AN UPDATE TO THE TRAFFIC IMPROVEMENT FEE PROGRAM FOR THE IRVINE BUSINESS COMPLEX, PURSUANT TO SECTION 9-36-14 OF THE ZONING ORDINANCE AND A MINOR MODIFICATION TO MITIGATION MEASURE 13-1 IN THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE 2010 IBC VISION PLAN ENVIRONMENTAL IMPACT REPORT

WHEREAS, at Public Hearings on July 13 and July 27, 2010, the City Council of the City of Irvine adopted a General Plan Amendment (00497846–PGA) and Zone Change (00497861-PZC) for the Irvine Business Complex (IBC) Vision Plan Project; and,

WHEREAS, in connection with the adoption of the above-described IBC Vision Plan Project, the IBC Vision Plan Program Environmental Impact Report (EIR) (SCH No. 2007011024) ("IBC EIR") was certified as adequate and its corresponding Mitigation Monitoring and Reporting Program (MMRP) was adopted by the Irvine City Council on July 13, 2010; and

WHEREAS, as part of the above-described IBC Vision Plan Project, the City conducted a comprehensive traffic study of the IBC (the "2010 Traffic Study") and added Section 9-36-14 to the Irvine Zoning Ordinance, which created an "IBC Traffic Improvement Fee Program" to provide partial funding for the implementation of the areawide circulation mitigation program identified in the IBC EIR; and

WHEREAS, subsection (K) of Section 9-36-14 of the Irvine Zoning Ordinance, requires to periodically "undertake an updated comprehensive traffic study for the IBC, to evaluate the implementation of the original traffic study and update mitigation as needed"; and

WHEREAS, in accordance with the Zoning Ordinance, in 2015, the City engaged expert consultants to prepare an Irvine Business Complex Vision Plan 2015 Traffic Study Update (prepared by Iteris and HDR, dated January 13, 2016) (referred to herein as the "2015 Traffic Study Update"), and in 2015, the City engaged expert consultants to prepare a 2015 Update to Irvine Business Complex Vision Plan Traffic Fee Nexus Study (prepared by Iteris and HDR, dated June 7, 2017) (referred to herein as the "2015 IBC Nexus Study Update"); and

ATTACHMENT 9

WHEREAS, the 2015 IBC Nexus Study Update prepared in conjunction with 2015 Traffic Study Update includes: cost estimates for circulation improvements; potential funding sources for necessary improvements, including provisions of the updated IBC Development Fee Program; an assessment of the estimated funding shortfall; and potential funding sources to fill the estimated shortfall; and

WHEREAS, the 2015 IBC Traffic Fee Nexus Update also proposes establishing final fair-share fees for implementation of circulation improvements in the IBC; and

WHEREAS, an Addendum to the IBC EIR was prepared to analyze the potential environmental impacts associated with a 2015 update to the IBC Traffic Improvement Fee Program and associated its nexus study (*i.e*., the 2015 Nexus Study Update) and a minor change to Mitigation Measure 13-1 to the MMRP for the IBC EIR to allow the City to update its traffic study in accordance with the procedures and standards set forth in Section 9-36-14(K) of the Irvine Zoning Ordinance (collectively, the "Project"); and

WHEREAS, the Transportation Commission has considered information presented the City staff and other interested parties at public meetings held on July 18 and August 15, 2017; and

WHEREAS, the City Council has considered information presented by City staff and other interested parties at duly noticed public hearings held on June 27 and September 12, 2017; and

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. The Recitals above are true and correct and incorporated herein by this reference.

SECTION 2. An Addendum to the IBC Vision Plan Program Environmental Impact Report (SCH No. 2007011024) ("IBC EIR") has been prepared pursuant to Section 15164 of the CEQA Guidelines, and concluded that the proposed Project is not anticipated to have a significant effect on the environment.

SECTION 3. The Addendum makes minor changes to Mitigation Measure 13-1. As approved in 2010, Mitigation Measure 13-1 required an initial traffic study for traffic improvements at fifteen specified intersections. The Addendum updates Mitigation Measure 13-1 to allow for subsequent traffic studies in accordance with Section 9-36-14(K) of the Irvine Zoning Ordinance. The City Council hereby finds and declares, based on substantial evidence in the record, that the City has a legitimate reason to modify Mitigation Measure 13-1 — as drafted, the mitigation measure does not contemplate and potentially constrains the scope of updated traffic studies that are required by the Zoning Ordinance. While Mitigation Measure 13-1 was effective for the initial traffic study, it's lack of flexibility could render it less effective for subsequent traffic studies. The City Council further finds and declares, based on substantial evidence in the record, that the

changes to Mitigation Measure 13-1 do not require a subsequent EIR because the updated 2015 Traffic Study notes that the residential unit intensity cap has not increased since the 2010 Traffic Study, and that there is a net overall result of fewer impacts compared to the 2010 Traffic Study. The impacts for the interim year forecast drop from 13 to 10, and for the buildout year forecast from 41 to 22. In addition, four intersections were impacted in the 2010 IBC EIR Traffic Study, whereas in the 2015 Traffic Study Update, only one intersection is impacted, and the number of intersections impacted in buildout fell from 15 to 10. The Project addresses deficient intersections through updated mitigation fees.

Additionally, the number of impacted freeway and other ramps dropped from 5 to 2, and 11 to 6, respectively, since 2010. Lastly, while there are some additional traffic impacts since 2010, there is no substantial evidence in the record that these increases will result in a more severe impact requiring major revisions necessitating a subsequent or supplemental EIR. For instance, four segments of the freeway mainline were impacted in the 2010 Traffic Study, whereas six locations are impacted under the 2015 Traffic Study Update. But during the buildout year, that number drops from 14 impacted segments in the 2010 Traffic Study to 5 locations impacted in the 2015 Traffic Study Update. The fact that the 2015 Traffic Study Update's results indicate that no additional proposed changes are required to the City's General Plan further supports the use of an addendum for the Project.

SECTION 4. Based on substantial evidence in the record including, without limitation, the information and analysis contained in the Addendum, and pursuant to Section 15162 of the California Code of Regulations, the City Council hereby finds and declares that:

A. There are no substantial changes proposed in the Project that would require major revisions of the previous EIR because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

B. Substantial changes have not occurred with respect to the circumstances under which the Project is undertaken which would require major revisions of the previous EIR because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

C. There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, showing any of the following:

    1. The Project would have one or more significant effects not discussed in the previous EIR;

2. Significant effects previously examined would be substantially more severe than shown in the previous EIR;

3. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; and

4. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

SECTION 5. Based on the above, the City Council hereby approves and adopts the changes to Mitigation Measure 13-1 set forth below (with new language underlined):

Revised Mitigation Measure 13-1

Prior to the issuance of the first building permit pursuant to the proposed project, the City of Irvine shall prepare a "nexus" study that will initially serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq, for the Irvine Business Complex to support General Plan and Zoning changes under consideration for the Irvine Business Complex Vision Plan. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. The following traffic improvements and facilities are necessary to mitigate project impacts and shall be included, among other improvements, in the original AB 1600 nexus study adopted in 2011:

Costa Mesa

- Intersection #12: SR-55 Southbound Frontage Road at Baker Street
    - Improve the southbound approach to one left turn lane, one shared through left, one through lane, and one right turn lane. Restripe the eastbound approach to two through lanes and a shared through right turn lane.

- Intersection #13: SR-55 Northbound Frontage Road at Baker Street
    - Restripe the eastbound approach to include a single left turn lane, three through lanes, and no right turn lane, plus the addition of a northbound defacto right turn lane.

Irvine

- Intersection #141: Jamboree Road and Main Street

- Improve the northbound and southbound approaches to 2 left turn lanes, 5 through lanes, and 1 right turn lane. Additionally, as part of this improvement, convert the westbound free right turn lane to a single right turn lane.

- Intersection #188: Harvard Avenue and Michelson Drive
  - Add a second southbound left turn lane.
- Intersection #232: Culver Drive and I-405 Northbound Ramps
  - Restripe the westbound approach of this intersection to one left turn lane, one right turn lane, and a shared left-right turn lane.

- Intersection #136: Jamboree Road and Barranca Parkway
  - Convert the existing free northbound right-turn lane to a standard right turn lane and add a fifth northbound through lane.

Newport Beach

- Intersection #62: Campus Drive at Bristol Street NB
  - In 2015, the required improvement is the implementation of the already planned addition of a fifth westbound through lane, consistent with the City of Newport Beach's General Plan buildout. For the buildout scenario, an additional improvement of a third southbound right turn lane is required. Implementation of the identified improvements results in acceptable operations under both scenarios and the mitigation appears to be physically feasible although potentially cost prohibitive due to potential impacts to a structure adjacent to the intersection. The addition of a 5th westbound through lane was identified by the City of Newport Beach as part of the Newport Beach General Plan Update Traffic Study (Urban Crossroads, 2006). The addition of a 3rd southbound right turn lane was identified in the John Wayne Airport (JWA) Improvement Program as an ancillary improvement to support the growth of the Airport. The City shall coordinate with Newport Beach and JWA to determine the timing and funding availability for this improvement.

- Intersection #85: MacArthur Boulevard and Birch Street
  - Improve the eastbound approach to two eastbound left-turn lanes and two southbound through lanes.

Santa Ana

- Intersection #543 Bristol Street and Segerstrom Avenue
  - Two alternative improvements are proposed and outlined below. The City of Irvine shall coordinate with the City of

Santa Ana to determine the most appropriate future improvement at this location.

- Alternative 1: Add 3rd eastbound through and westbound through lanes on Segerstrom Avenue.
- Alternative 2: Add 4th northbound through and southbound through lanes on Bristol Street.

- Intersection #723 Main Street and Dyer Road (Segerstrom)
  - Add a third northbound through lane and a defacto northbound right-turn lane.

- Intersection #730 Grand Avenue and Warner Avenue
  - Add a third westbound through lane.

Tustin

- Intersection #24: Newport Avenue and Walnut Avenue
  - Add a defacto westbound right turn lane and defacto northbound right turn lane.

- Intersection #93: Tustin Ranch Road and El Camino Real
  - Add a fourth southbound through lane and restripe the eastbound approach to one left turn lane, a shared through right turn lane and a right turn lane.

- Intersection #134: Loop Road/Park Avenue at Warner Avenue
  - Add a third eastbound through lane.

- Intersection #754: Red Hill Avenue at Carnegie Avenue/A Street
  - This intersection has a project impact under the Post-2030 scenario. The project impact is largely due to heavy traffic on the northbound through movement. Widening the northbound approach to provide a fourth northbound through lane on Red Hill. This intersection is expected to be substantially expanded as a result of development of the Tustin Legacy project and shall be monitored to observe if any additional improvements are warranted when that project nears buildout.

Following adoption of the initial 2011 AB 1600 nexus study, the City shall periodically undertake an updated comprehensive AB 1600 nexus study for the IBC to evaluate the implementation of the original and subsequently adopted AB 1600 nexus studies and update mitigation as needed. Subsequent AB 1600 nexus studies for the IBC shall be performed in accordance with Section 9-36-14(K) of the Irvine Zoning Ordinance, as amended from time to time.

SECTION 6. Pursuant to Fish and Game Code Section 711.4(c), all required Fish and Game filing fees have been paid subsequent to certification of the IBC Vision Plan and Mixed Use Overlay Zoning Ordinance EIR, which includes Planning Area 36 (SCH No. 2007011024).

SECTION 7. The City Council hereby finds and declares, based on substantial evidence in the record, that the findings required by State law regarding justification of development fees for public facilities as a result of the ongoing implementation of the IBC Vision Plan Project are satisfied as follows:

A. The purpose of the fees has been identified. The fees are intended to fund area-wide circulation improvements within the IBC Vision Plan Project boundary. These improvements are required due to circulation impacts associated with buildout of the IBC Vision Plan Project.

B. The public facilities to be implemented as a result of the fees have been identified. Arterial and Intersection improvements necessary to accommodate the IBC Vision Plan Project are identified in the Circulation and Traffic Study prepared as part of the certified EIR for the IBC Vision Plan (referred to herein as the "2010 Traffic Study") and the 2015 Traffic Study Update.

C. There is a reasonable relationship between the fees' use and the type of development project on which the fee is imposed. The fees imposed in the IBC Traffic Improvement Fee Program apply to all types of future non-vested traffic-generating development, and are calibrated based on the level of development intensity associated with each different development type.

D. There is a reasonable relationship between the need for the public facilities and the type of development for which the fee is imposed. The circulation improvements identified in the IBC Traffic Improvement Fee Program are required to mitigate traffic impacts directly attributable to the General Plan and Zoning development intensity authorized by General Plan Amendment 00497846–PGA and Zone Change 00497861-PZC. Implementation of the circulation improvements proposed within the 2015 Traffic Study Update and calibrated based on the level of development intensity associated with each different development type.

E. There is a reasonable relationship between the amount of the fees and the costs of the public facilities attributable to the development on which the fee is based. There is a direct correlation between the fee amounts per square foot (or unit) of development and the costs of the circulation improvements and associated administrative costs. A Nexus Study which establishes the relationship between the amount of the fees, the cost of the facilities and the amount attributable to development within the IBC (referred to herein as the 2015 Nexus Study Update") has been prepared as part of the 2015 Traffic Study Update process.

SECTION 8. Based on the above, the City Council hereby adopts the 2015-17 IBC Traffic Improvement Fee Program including the corresponding 2017-18 fee update, as described in this Section and detailed in the 2015 Update to Irvine Business Complex Vision Plan Traffic Fee Nexus Study (dated June 7, 2017) (referred to herein as the "2015 IBC Nexus Study Update"), to raise revenue for the construction of area-wide circulation improvements needed to serve the IBC as development occurs.

A. Boundaries of the final fee district: All property within the IBC, as outlined in Exhibit A, is included in the final fee district.

B. Final fee schedule: The Zoning Ordinance for the IBC specifies the maximum allowable development intensity of land-uses throughout the IBC. The fees are based on a fair share payment as calculated by the level of development intensity "trips" generated by each land use category. The fees to be paid are as follows:

Residential (Dwelling Unit)	$4,697
Commercial (Square Foot)	$3,796
Hotel (Room)	$6,140
Ext Stay Hotel (Room)	$13.97
Office (Square Foot)	$13.97
Manufacturing (Square Foot)	$3.79
Mini-Warehouse (Square Foot)	$2.44
Transfer of Development Rights:	$500.00 per PM Peak Hour Trip

C. Administration of Program: All administration fees shall be used solely for the implementation of the area-wide circulation mitigation program identified in the Final Program Environmental Impact Report for the IBC Vision Plan. Any use of fees by City of Irvine staff or consultants shall be for administering annual fee updates, monitoring/updating the IBC database, inter-departmental and inter-agency coordination, transportation demand management strategies to reduce demand on the IBC roadway system, and reassessment of land use assumptions and reassessment of the IBC Vision Plan EIR Traffic Study and improvement list as noted in Section 9 of this resolution.

D. The proposed fees shall apply to all residential and non-residential development, including density bonus units, for which building permits are issued following the adoption of this resolution.

SECTION 9. Resolution No. 93-35 shall continue to apply only to development projects that are not subject to the payment of fees pursuant to this Resolution.

SECTION 10. Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Resolution is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The City Council hereby declares that it would have adopted this Resolution and each and every section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more section, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared unconstitutional.

SECTION 11. That the City Clerk shall certify to the passage and adoption of this Resolution and enter it into the book of original Resolutions.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular hearing held on the 12th day of September 2017, by the following roll call vote:

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

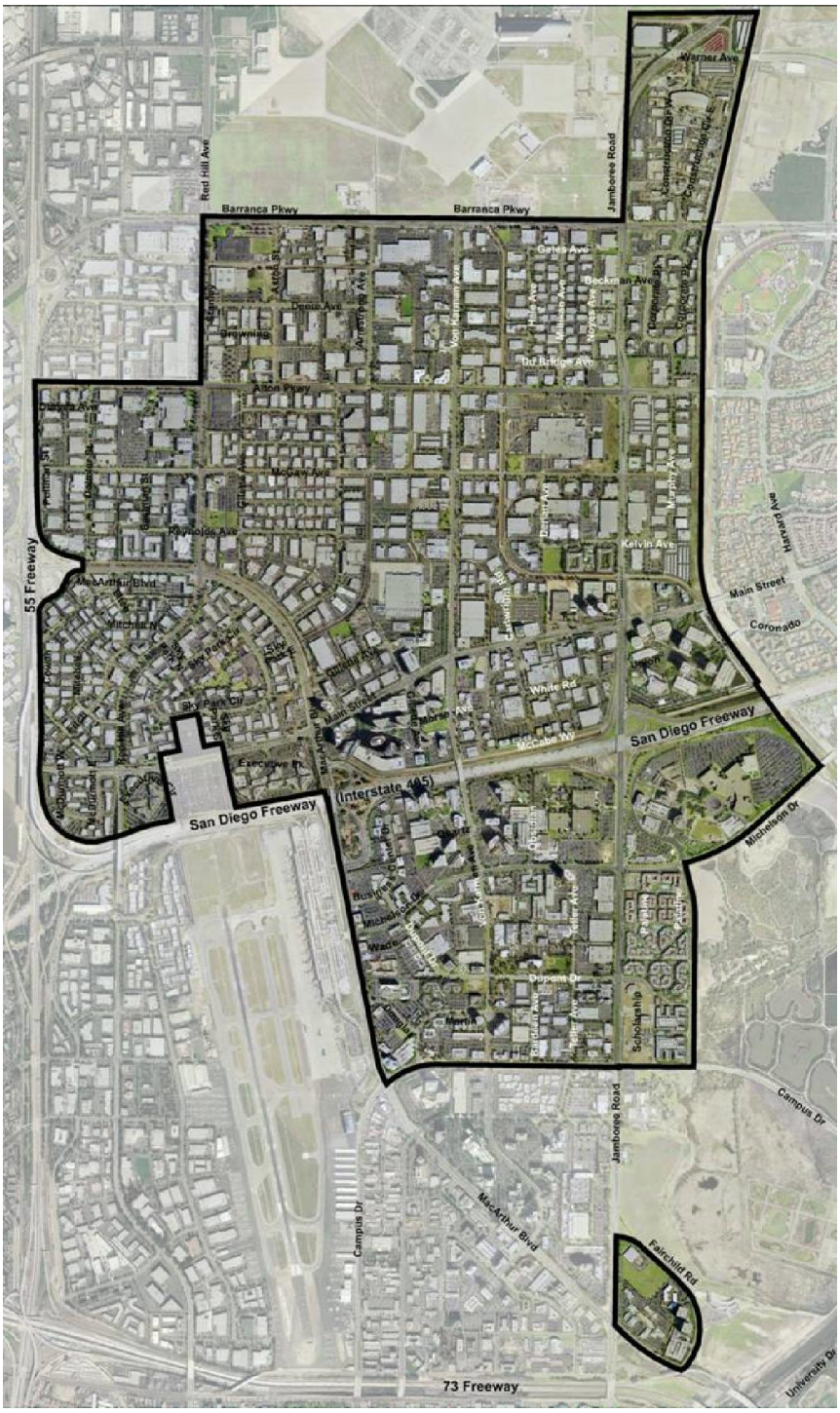
I, Molly McLaughlin, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at an adjourned regular meeting of the City Council of the City of Irvine on the 12th day of September 2017, by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE



Irvine Business Complex Boundary

Exhibit A

6.3

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: CITY COUNCIL OVERRIDE OF INCONSISTENCY DETERMINATION BY THE AIRPORT LAND USE COMMISSION OF ORANGE COUNTY

Interim Director of Community Development

City Manager

RECOMMENDED ACTION

1. Reopen the public hearing.
2. Continue the public hearing to the October 24, 2017 meeting.

EXECUTIVE SUMMARY

On July 25, 2017, the City Council reopened a public hearing, related to the request by the project applicant for The Landmark Project, to consider an override of the Airport Land Use Commission (ALUC) for Orange County's inconsistency determination for the project.

After the presentation of evidence by staff and testimony from a number of public speakers, the City Council requested that staff issue a limited Request for Proposals (RFP) to hire an independent aviation consultant. The consultant would be tasked with reviewing all project-related materials and providing a recommendation to the City Council concluding whether the proposed project is safe and whether the override request should be supported.

On July 26, staff issued an RFP for aviation consultant services and sent the RFP to eight firms. No proposals were received by the August 8 deadline. Some firms indicated interest, but stated that the established timeline for preparation of their review was insufficient and recommended that an additional 30 days be added to the schedule. As a result, a second RFP was issued on August 14 extending the deadline for submittal and setting the due date for the consultant's final evaluation of the project in early October.

Staff, therefore, recommends the hearing on this item be continued to the October 24 City Council meeting.

ALTERNATIVES CONSIDERED

None.

FINANCIAL IMPACT

None.

REPORT PREPARED BY Stephanie Frady, Senior Planner

cc: Sean Cao, Great Far East (via email: sean.cao@greatfareast.com)
Hope Fazio, Great Far East (via email: hope.fazio@greatfareast.com)
Tim Strader, Starpointe Ventures (via email: tj@starpointeventures.com)
Kari Rigoni, Airport Land Use Commission (via email: KRigoni@ocair.com)
Lea Choum, John Wayne Airport (via email: LChoum@ocair.com)
Joel Belding, Principal Planner

File: 00659728-PMPC

6.4

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: CONSIDERATION OF AN ORDINANCE GRANTING NONEXCLUSIVE FRANCHISES FOR COMMERCIAL SOLID WASTE COLLECTION

Director of Public Works

City Manager

RECOMMENDED ACTION

1) Receive staff report.
2) Open the public hearing; receive public input.
3) Close the public hearing.
4) City Council comments and questions.
5) Introduce for first reading and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING NONEXCLUSIVE FRANCHISES FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES, FOR THE PERIOD OF OCTOBER 27, 2017 THROUGH AUGUST 31, 2026

EXECUTIVE SUMMARY

On August 8, 2017, the City Council approved a Resolution of Intent to consider granting new nonexclusive franchise agreements to commercial waste haulers and set September 12, 2017 as the date for a public hearing on the matter. A copy of the August 8 staff report is included as Attachment 1. On August 24, staff met with waste hauler representatives and the California Waste Haulers Association to discuss details of the proposed new franchise agreement. The meeting was constructive in clarifying provisions of the agreement and proposed revisions to the franchise area map. There have been no further inquiries received by staff since the August 24 meeting. The draft agreement and proposed map are presented for City Council consideration in the same form and content as submitted to the City Council on August 8, 2017.

Pursuant to the City Charter, the award of a franchise requires a public hearing to consider adoption of an ordinance granting said franchise. The recommended actions satisfy this requirement for the reading and introduction of an ordinance (Attachment 2) approving the proposed nonexclusive franchise agreements. If approved by the City Council, a second reading and adoption of the ordinance will be presented for

consideration by the City Council on September 26, 2017 with the new agreements effective on October 27, 2017 (30 days following the second reading and adoption of the ordinance). The new agreements are proposed for a nine-year term through August 31, 2026 to coincide with the City's existing exclusive franchise for residential services.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On August 21, 2017, the Finance Commission, by a vote of 4-0-1 (Commissioners Dressler, Sievers, Bartlett and Stein voting in favor; Commissioner Reyno absent), recommended that the City Council approve the proposed new nonexclusive franchise agreement.

ANALYSIS

The new nonexclusive franchise agreement (included with the proposed ordinance Attachment 2) allows for the continuation of the City's long standing dual waste service delivery system. This dual system uses an exclusive franchise, with a single waste hauler, to provide residential trash collection and a nonexclusive franchise program that allows other waste haulers to provide services to the commercial sector in an open and competitive environment. The existing Nonexclusive Franchise Agreement was approved by the City Council in 2007 and extended (on May 9, 2017 by the City Council) to expire on December 31, 2017.

The proposed new nonexclusive agreement, prepared by staff and the City Attorney, retains the open competition framework and enables businesses to meet targeted goals for waste diversion from landfills. The proposed agreement includes the following provisions:

- Haulers must divert a minimum 50 percent of all solid waste collected to non-disposal facilities, such as material recovery facilities, and other disposal and reuse facilities;

- Hauler compliance with any new waste diversion requirements or new mandated programs that may be imposed by the State during the term of the agreement;

- Requires haulers to provide specific recycling services and outreach to its customers to ensure City compliance with State recycling laws;

- Requires haulers to maintain strict insurance and performance bond coverage;

- Hauler performance reviews to ensure accuracy of franchise fee payments, compliance with waste diversion requirements and other service provisions;

- A quarterly franchise fee structure encouraging waste diversion from landfills. Haulers pay franchise fees to the City based on gross receipts at rates dependent on the type of facility they deliver waste to, as follows:

    - 10 percent franchise fee on solid waste material delivered to a landfill or other similar disposal facility; and

    - 3 percent franchise fee on solid waste material delivered to a material recovery facility (MRF); and

    - No franchise fees on recyclables delivered directly to recycling end users, green material composting or on-site processing facility, or construction debris and inert waste delivered to an appropriate and approved facility.

Changes from the existing 2007 agreement include:

- A revised service area map (included with the proposed ordinance Attachment 2) reflecting the modified franchise areas previously presented to the City Council on August 8, 2017;

- A fixed nine-year term ending on August 31, 2026, without renewal options, consistent with the City's Exclusive Franchise with Waste Management;

- A provision allowing a waste hauler to continue servicing its existing business accounts regardless of new franchise area designation for a limited five year period, in lieu of entering into the franchise agreement, in accordance with state law;

- Revised clean air vehicle technology requirements in accordance with AQMD Rule 1193;

- New state mandated requirements for commercial recycling, organics, and green waste;

- Updated liability and insurance limits.

A redline copy of the existing agreement is included as Attachment 3 for reference. The primary drivers for the changes from the existing 2007 nonexclusive agreement (currently in effect) and the proposed agreement are: (1) general updating to reflect changes in laws, regulations and best practices over the last 10 years, and (2) changes to align the nonexclusive franchise with the text, terms, and organization of the exclusive franchise agreement approved by the City Council last year. The revisions reflected in the redline were included in the version of the agreement that was provided

to the haulers in April 2017 and included with the May 9 and August 8 staff reports to the City Council.

Consistent with the existing nonexclusive franchise program, the City Manager is authorized to accept new haulers into the franchise system if they meet standards and requirements identified in the proposed agreement. This process ensures that prospective franchisees have the essential capabilities and experience to provide solid waste collection services in accordance with the City's Nonexclusive Agreement.

ALTERNATIVES CONSIDERED

Staff has not explored alternatives other than those described and considered by the City Council with the August 8 staff report. If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may direct staff to make further revisions to the terms of the agreement and/or the proposed map as deemed appropriate by the City Council. Changes to any existing Village Commercial designated properties require consent from Waste Management.

FINANCIAL IMPACT

Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately $500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by haulers over the agreement term.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst

ATTACHMENT

1. August 8, 2017 Staff Report
2. Proposed Ordinance, Nonexclusive Franchise Agreement and Service Area Map
3. Existing Agreement Redline

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

Director of Public Works

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

EXECUTIVE SUMMARY

On May 9, 2017, the City Council reviewed the subject resolution, as the first in a multistep process, for granting new nonexclusive franchise agreements to the City's existing commercial waste haulers. The City Council also considered a proposed franchise area map and directed staff to return with a revised map that would potentially address concerns expressed by Waste Management of Orange County (the City's exclusive hauler for residential waste services) at the May 9 City Council meeting.

Accordingly, staff has prepared a revised map (Attachment 1) for consideration by the City Council that is supported by Waste Management. The updated map includes the following revisions to the map presented on May 9:

- Market Place Business Center (located behind the Irvine Market Place along the I-5 Freeway) is proposed to retain its existing Village Commercial designation
- Jeffrey Business Center (located at Jeffrey and the I-5 freeway) is proposed to retain its existing Village Commercial designation
- Los Olivos Village Center (located at Irvine Center Drive and the I-5 freeway) is proposed to be designated as Village Commercial

ATTACHMENT 1

The updated map retains the previous staff recommendations to convert the following centers from existing Village Commercial (exclusive to Waste Management) to nonexclusive (open market rate competitive service):

- Irvine Market Place (located along Jamboree between I-5 freeway and Irvine Boulevard
- Sand Canyon Medical/Office Centers (located along Sand Canyon between Irvine Center Drive and Alton)

The Irvine Company is the property owner for all centers listed above and has indicated it has no objection to the proposed changes.

Staff is recommending that the City Council adopt the proposed resolution setting September 12, 2017 as the public hearing date for City Council consideration of the proposed new franchise. Pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise, set forth the terms and conditions thereof, and set the place and time for a public hearing thereon. The recommended resolution (Attachment 2) satisfies this requirement. The City Charter also requires that franchise agreements be adopted by ordinance. The proposed public hearing on September 12 will satisfy this requirement for the reading and introduction of an ordinance approving the proposed franchise agreements, with a second reading and adoption of the ordinance on September 26, 2017.

A list of the City's existing authorized nonexclusive haulers is included as Attachment 3. As stated in the May 9 staff report (Attachment 4), the proposed new franchise agreement retains many of the same provisions of the existing nonexclusive agreement, including a tiered franchise fee structure designed to promote recycling. The proposed agreement also enhances programs necessary for City compliance with state waste diversion mandates and provisions for hauler qualifications and insurance. The proposed new nonexclusive agreement will also incorporate the proposed revised service area map.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

This item is scheduled for Finance Commission review and recommendation to the City Council on August 21, 2017, subject to City Council approval of the recommended action.

ANALYSIS

The new proposed nonexclusive waste collection franchise agreement (Attachment 5) was prepared by staff and the City Attorney for City Council consideration. The draft

agreement was previously shared with the City's existing franchisees and staff is not aware of any objection to the proposed terms of the agreement.

The terms of the proposed new agreement retain provisions contained in the existing nonexclusive franchise agreement while augmenting provisions to address new state laws and specified program enhancements. The following is a summary of the terms and conditions proposed by staff for City Council consideration:

1. **Term:** A new nine-year term from October 26, 2017 to August 31, 2026 to coincide with the term of the City's exclusive agreement with Waste Management.

2. **Retention of Existing Agreement Benefits:**
   a. Open and competitive program for commercial properties located within the nonexclusive franchise area.
   b. Support for public education programs.
   c. A tiered franchise fee that promotes recycling.

3. **AB 341 Commercial Recycling Compliance:** Continued recycling programs for commercial properties within the franchise area with new expanded outreach and compliance assistance from haulers to enhance the City's compliance with state law AB 341, that mandates commercial recycling statewide.

4. **Organics Program:** Competitive organics waste program for businesses in the franchise area that are required to comply with State law AB 1826 requiring certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper).

5. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than the original franchisee will require City Council approval of the contract assignment.

6. **Hauler Performance Reviews:** Annual compliance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws.

7. **Revised Nonexclusive and Village Commercial Map:** The existing franchise agreement includes a map depicting those commercial areas subject to the proposed nonexclusive franchise agreement, and those areas known as "Village Commercial Premises" that are subject to the City's exclusive franchise. As directed by the City Council on May 9, the proposed new agreement provides an updated map accounting for existing land uses, future development areas and revisions proposed by Waste Management that are supported by staff and are presented for City Council consideration.

The existing nonexclusive franchise agreements are set to expire upon the earlier of December 31, 2017, or the date that a new nonexclusive franchise agreement has been approved by the City Council and becomes effective. As referenced above, pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise. The recommended action satisfies this requirement and approval of the proposed resolution (Attachment 2) sets September 12, 2017 as the public hearing date for City Council consideration of the proposed franchise. The proposed new franchise agreement would not be effective until 30 days following the second reading of the ordinance (i.e., October 26, 2017).

ALTERNATIVES CONSIDERED

The City Council may elect to discontinue the City's existing nonexclusive franchise program and direct staff to initiate a competitive bid process for exclusive waste handling services for the commercial business areas of the City, similar to its exclusive arrangement with Waste Management for village commercial properties and return with the results of the bidding process for consideration by the City Council. The City Council may also direct staff to negotiate terms for an exclusive arrangement with any of the existing nonexclusive haulers for exclusive services to the commercial areas and return with the result of that negotiation process for further consideration by the City Council. It should be noted that in considering the potential for an exclusive arrangement for the City's commercial properties, state law requires that the City provide its haulers with a five-year notice period of the proposed termination of its franchise. Therefore, a five-year transition period would be required to be incorporated with either of these two alternatives. These alternatives are not recommended by staff because the open and competitive program has worked well for commercial properties and promotes an open market rate competitive service for Irvine businesses located within the nonexclusive franchise area.

If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may also direct staff to make further revisions to the proposed map as deemed appropriate by the City Council or may direct that no changes be made to the map at this time. A copy of the existing service area map is included as Attachment 6.

FINANCIAL IMPACT

Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately $500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by the haulers over the term of the agreements.

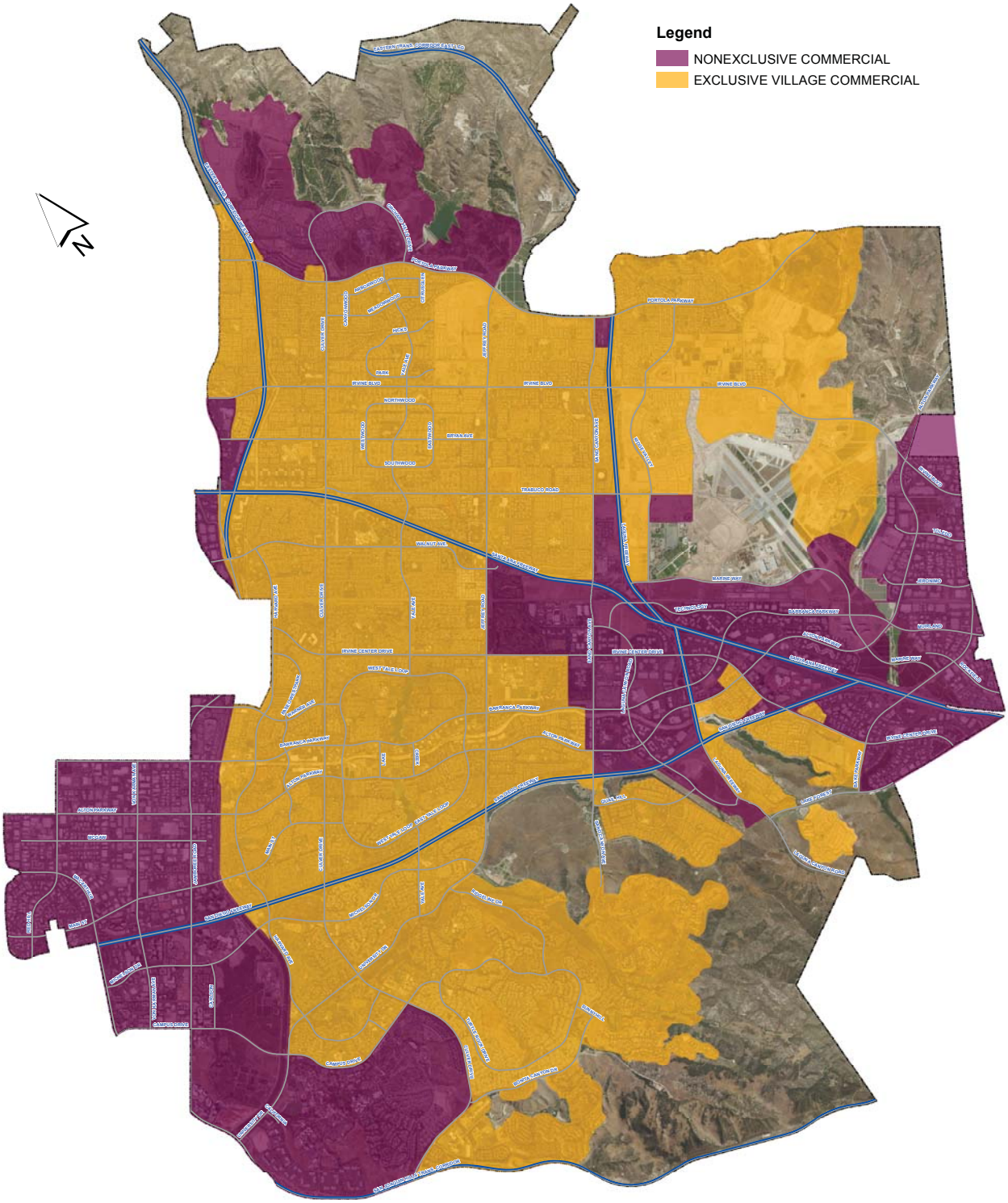
REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst

ATTACHMENT

1. Proposed Service Area Map
2. Resolution
3. Authorized Nonexclusive Haulers
4. May 9, 2017 City Council Staff Report (including attachment 1)
5. Draft Nonexclusive Franchise Agreement
6. Existing Service Area Map

CITY OF IRVINE

PROPOSED
COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

Date: 6/20/2017 Document Path: \\coi-file05\CommDev\B & S\GIS\projects\PublicWorks\Bridgeford_R_WasteMap_20170321_vn\WasteHaulers_20170620.mxd

CITY COUNCIL RESOLUTION NO. 17-xx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

WHEREAS, in the interest of public health and safety, and to facilitate compliance with state recycling mandates, the City of Irvine enables solid waste and recycling collection through a nonexclusive franchise agreement with qualified waste haulers;

WHEREAS, on May 9, 2017, the City Council took action to extend the City's existing nonexclusive franchise agreement for the collection of commercial solid waste (the "Existing Agreement") to expire on or before December 31, 2017;

WHEREAS, as part of the process to replace the expiring Existing Agreement, a contract plan has been developed by the City in cooperation with the City's waste haulers and other stakeholders;

WHEREAS, based on the contract plan, City staff is finalizing the provisions of a nonexclusive franchise agreement with the City's waste haulers for commercial solid waste handling services (the "Proposed Agreement") and will be prepared to introduce an ordinance approving the Proposed Agreement to the City Council at its meeting on September 12, 2017;

WHEREAS, if the ordinance is approved, a second reading of the ordinance will occur on September 26, 2017, and if approved, the ordinance will become effective on October 26, 2017;

WHEREAS, the City of Irvine's charter requires that prior to the grant of a new franchise the City Council adopt a resolution declaring its intention to grant such a franchise, which also sets a day, time, and place for interested persons to be heard regarding the Council's decision to grant or deny the grant of a franchise.

NOW, THEREFORE, the City Council of the City of Irvine does hereby resolve as follows:

Section 1. The City Council of the City of Irvine hereby declares its intention to consider granting nonexclusive solid waste handling franchises to any hauler that successfully demonstrates and affirms its qualifications and capabilities to comply with the City's nonexclusive solid waste handling franchise agreement through a City provided application process administered by the City. The nonexclusive solid waste handling franchise is proposed to be granted pursuant to the following terms and conditions:

A. The franchise shall be nonexclusive with respect to 1) solid waste handling services occurring on a regular schedule (such as weekly service) at commercial premises (other than those designated as village commercial), and (2) temporary bin services, at any premises in the City (including residential and village commercial premises).

B. The franchise shall have a fixed term, which term shall commence from the day the agreement is signed and entered into by the City and the franchisee, and end at midnight on August 31, 2026, unless the agreement is extended or terminated at an earlier date pursuant to the terms of the agreement.

C. The franchise will require franchisees to ensure the City meets its obligations pursuant to AB 939, AB341, AB1826, and Public Resources Code 40000, et al., by committing a good faith effort to divert waste from landfills, with a goal of a minimum of 50% waste diversion, and indemnify the City from any potential fines and penalties that may be associated with a franchisee's failure to perform under the terms of the Agreement.

D. The franchise will require haulers to indemnify the City for claims based upon hazardous material liability.

E. The franchise will require the payment of franchise fees on "gross receipts" of franchisees, through an incentivized fee structure that encourages hauler waste diversion practices.

F. The franchise will require franchisees to assist the City in providing public education programs as mandated by AB 939, AB341, AB1826, and Public Resources Code 40000, et al.

G. The franchise will include audits pertaining to franchisee performance of the terms of the Agreement.

Section 2. A public hearing shall occur on September 12, 2017, at 4:00 pm, or as soon thereafter as addressed by the City Council, at which time any person having an interest in or objecting to the grant of the franchise may appear before the City Council and be heard thereon.

Section 3. The City Clerk is directed to publish this resolution at least once, not less than ten days prior to the above noted public hearing.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 8th day of August 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine held on the 8th day of August 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

Nonexclusive Franchise Waste Haulers

Company Name	Headquarters
A-2-Z Construction Svcs	Irvine
California Waste Services (CWS)	Gardena
CR&R, Inc.	Stanton
Direct Disposal	Huntington Beach
In-and-Out Removal	Pomona
Interior Removal Specialist (IRS) Demolition	South Gate
JPA Construction Clean-Up Svcs, Inc.	Santa Ana
Key Disposal, Inc.	Montebello
Mission Recycling	Pomona
NASA Services, Inc.	Montebello
New Green Day Recycling, L.L.C.	Los Angeles
Pacific Line Cleanup, Inc.	Laguna Niguel
Rainbow Disposal Co., Inc.	Huntington Beach
Republic Services	Anaheim
Robert's Waste & Recycling	Santa Ana
Southern Calif. Environmental, Inc.	Huntington Beach
Tierra Verde Industries	Irvine
United Pacific Waste	Pico Rivera
Universal Waste Systems Inc.	Santa Fe Springs
Ware Disposal, Inc.	Santa Ana
Waste Management of Orange County	Santa Ana

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

Director of Public Works

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

EXECUTIVE SUMMARY

On June 28, 2016, the City Council approved a new exclusive waste collection franchise agreement with Waste Management of Orange County (WM) for residential and village commercial designated areas of the City (Attachment 1). All other commercial properties in the City (i.e., those properties not within the village commercial areas) are open for competitive services and rates from any of 21 nonexclusive haulers authorized to provide said services through separate individual nonexclusive franchise agreements with the City. A map of the existing nonexclusive commercial service areas, not designated as village commercial, is included as Attachment 2. Because the nonexclusive agreements cover areas of the City not subject to the City's exclusive franchise, those nonexclusive agreements have traditionally not been considered for a public competitive bidding process or for inclusion in the City's existing exclusive franchise. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement.

The June 28 staff report indicated staff's intent to update the service area map with the next iteration of nonexclusive franchise agreements. Staff initiated discussions with the existing nonexclusive haulers in July 2016 and continued to engage interested parties in review of the proposed updated service area map. A list of the City's existing authorized nonexclusive haulers in included as Attachment 3. The City's existing

agreements with its nonexclusive haulers expire on June 30, 2017 and staff recommends consideration of the proposed new franchise agreement and the accompanying revised map (Attachment 4) by the City Council.

The proposed new agreement retains many of the same provisions of the existing agreement, including a tiered franchise fee structure designed to promote recycling. The proposed agreement also enhances programs necessary for City compliance with state waste diversion mandates and provisions for hauler qualifications and insurance. In addition, as referenced above, the proposed new agreement also provides a revised service area map.

Pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise, set forth the terms and conditions thereof, and set the place and time for a public hearing thereon. The recommended resolution (Attachment 5) satisfies this requirement and sets May 23, 2017 as the public hearing date for City Council consideration of the proposed new franchise. The City Charter also requires that franchise agreements be adopted by ordinance. The proposed public hearing on May 23 will satisfy this requirement for the reading and introduction of an ordinance approving the proposed franchise agreements, with a second reading and adoption of the ordinance on June 13, 2017.

As referenced above, the existing nonexclusive franchise agreements are set to terminate on June 30, 2017 and the City Charter requires that the proposed franchise agreement be approved by ordinance. The proposed resolution takes into account the timing related to the effectiveness of an ordinance, and the possibility that the City Council may take action other than as recommended by staff. In this regard, the proposed resolution authorizes the extension of the term of the existing nonexclusive franchise agreements for a period of up to six months to ensure there is no interruption in services prior to the time the City Council's action on this matter become final.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

This item is scheduled for review by the City's Finance Commission on May 15, 2017.

ANALYSIS

Staff and the City Attorney have prepared the proposed new nonexclusive waste collection franchise agreement for consideration by the City Council. The draft agreement was shared with the City's existing franchisees and staff is not aware of any objection to the proposed terms of the agreement. Discussions regarding the proposed revisions to the service map are ongoing.

The terms of the proposed new agreement retain provisions contained in the existing nonexclusive franchise agreement while augmenting provisions to address new state

laws and specified program enhancements. The following is a summary of the terms and conditions proposed by staff for City Council consideration:

1. **Term:** A new nine-year term from July 13, 2017 to August 31, 2026 to coincide with the term of the City's exclusive agreement with Waste Management.

2. **Retention of Existing Agreement Benefits:**
   a. Open and competitive program for commercial properties located within the nonexclusive franchise area.
   b. Support for public education programs.
   c. A tiered franchise fee that promotes recycling.

3. **AB 341 Commercial Recycling Compliance:** Continued recycling programs for commercial properties within the franchise area with new expanded outreach and compliance assistance from haulers to enhance the City's compliance with state law AB 341, that mandates commercial recycling statewide.

4. **Organics Program:** Competitive organics waste program for businesses in the franchise area that are required to comply with State law AB1826 requiring certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper).

5. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than the original franchisee will require City Council approval of the contract assignment.

6. **Hauler Performance Reviews:** Annual compliance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws.

7. **Revised Nonexclusive and Village Commercial Map:** The existing franchise agreement includes a map depicting those commercial areas subject to the proposed nonexclusive franchise agreement, and those areas known as "Village Commercial Premises" that are subject to the City's exclusive franchise. The proposed new agreement provides an updated map to account for existing land uses, future development and development of the Great Park area.

As referenced above, pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise. The recommended action satisfies this requirement and approval of the proposed resolution (Attachment 5) sets May 23, 2017 as the public hearing date for City Council consideration of the proposed franchise. An ordinance approving the proposed new franchise agreement would not be effective until 30 days following the second reading of the ordinance (i.e., July 13, 2017). To provide the City with the maximum flexibility in considering the proposed new agreements, and to ensure there is no interruption in services prior to such time as the City Council's action on the proposed agreements become final, the proposed resolution also serves to extend the existing nonexclusive franchise agreements for up to six months. The proposed resolution provides that the existing agreements be extended until the earlier of December 31, 2017, or the date that a new nonexclusive franchise agreement has been approved by the City Council and becomes effective.

ALTERNATIVES CONSIDERED

The City Council may elect to discontinue the City's existing nonexclusive franchise program and direct staff to initiate a competitive bid process for exclusive waste handling services for the commercial business areas of the City, similar to its exclusive arrangement with Waste Management for village commercial properties and return with the results of the bidding process for consideration by the City Council. The City Council may also direct staff to negotiate terms for an exclusive arrangement with any of the existing nonexclusive haulers for exclusive services to the commercial areas and return with the result of that negotiation process for further consideration by the City Council. Under either of these scenarios, an extension to the existing nonexclusive agreements would be recommended by staff to ensure uninterrupted service to the commercial areas. It should also be noted that in considering the potential for an exclusive arrangement for the City's commercial properties, state law requires that the City provide its haulers with a five-year notice period of the proposed termination of its franchise. Therefore, a five-year transition period would be required to be incorporated with either of these two alternatives. These alternatives are not recommended by staff because the open and competitive program has worked well for commercial properties and promotes an open market rate competitive service for Irvine businesses located within the nonexclusive franchise area.

If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may also direct staff to make further revisions to the proposed map as deemed appropriate by the City Council or may direct that no changes be made to the map at this time.

FINANCIAL IMPACT

Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately $500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by the haulers over the term of the agreements.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst
Rebecca Bridgeford, Public Works Administrator

ATTACHMENT

1. June 28, 2016 City Council Staff Report (without attachments)
2. Existing Service Area Map
3. Authorized Nonexclusive Haulers
4. Draft Nonexclusive Franchise Agreement and Revised Service Area Map
5. Resolution

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: JUNE 28, 2016

TITLE: CONSIDERATION OF AN ORDINANCE GRANTING AN EXCLUSIVE FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY FOR SOLID WASTE HANDLING SERVICES TO RESIDENTIAL AND VILLAGE COMMERCIAL PREMISES

Director of Public Works

City Manager

RECOMMENDED ACTION

1. Receive staff report.
2. Open the public hearing; receive public input.
3. Close the public hearing.
4. City Council comments and questions.
5. Introduce for first reading and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING A SOLID WASTE HANDLING FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY, FOR THE PERIOD OF SEPTEMBER 1, 2016 THROUGH AUGUST 31, 2026

EXECUTIVE SUMMARY

On June 14, 2016, the City Council adopted a Resolution declaring its intent to consider granting a new franchise to Waste Management of Orange County (WM), setting forth the proposed terms and conditions thereof, and setting a public hearing date of June 28, 2016 as the date for the City Council to consider the proposed franchise. A copy of the June 14, 2016 staff report is included as Attachment 1. The public hearing on this matter was advertised per City policy on June 16, 2016.

On June 14, 2016, the City received a letter from the Los Angeles County Disposal Association indicating its interest in meeting with City representatives prior to the approval of a new franchise agreement. A meeting was held on June 22, 2016 with invitations extended to all 22 of the City's non-exclusive haulers. The meeting was attended by representatives from 8 haulers and staff provided information and responded to questions regarding the proposed new exclusive franchise agreement with WM. As of the printing date of this report, no other members of the public have submitted comments on the proposed franchise.

In accordance with the City Charter, the City Council may grant a franchise following a public hearing process. The recommended actions are the required next steps in the process should the City Council elect to grant a franchise to WM as recommended by staff.

On July 28, 2015, the City Council directed staff to negotiate and present for City Council consideration a new exclusive franchise agreement with WM for residential and village commercial waste and recycling collection services. These services have traditionally been provided under exclusive franchise agreements with WM and its predecessor without competitively bidding prior franchises. A copy of the July 28, 2015 staff report and meeting minutes are included for reference as Attachment 2.

The City's existing franchise agreement with WM is due to expire on June 30, 2017. This agreement is generally comprised of two major components. First, it requires WM to provide weekly trash and recycling service to all residential properties in the City regardless of village location. Second, the agreement designates certain commercial properties in or near residential villages as "Village Commercial". These commercial properties are included in the exclusive franchise area and may only receive their trash and recycling services from WM. Under the terms of its exclusive franchise agreement with the City, WM also is required to provide trash, recycling, and green waste collection services to all City facilities and public parks at no cost to the City.

An exclusive franchise for the City's residential and village commercial areas limits trash collection operations to one hauler, thereby providing uniform waste collection services to residents and mitigating traffic and infrastructure impacts to residential areas that would potentially occur if multiple trash haulers operated in those areas. These services have historically been provided at a very high service level and at a cost to Irvine residents that for many years has been the lowest in Orange County. The proposed franchise agreement would lower rates in the first year further still.

All other commercial properties in the City (i.e., those properties not within the village commercial areas) are now, and under the proposed new agreement would continue to be, open for competitive services and rates from any of 22 non-exclusive haulers authorized to provide said services through separate individual agreements with the City. A map of the existing non-exclusive commercial service areas (not designated as "Village Commercial") is included as Attachment 3.

The July 28, 2015 City Council staff report (Attachment 2) indicated the franchise service areas would be modified to reflect new residential villages with the next franchise. The proposed new agreement provides a framework for updating the existing map to account for new residential villages, future village commercial development and future build-out of the City's Great Park property. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with

anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. All commercial properties within the non-exclusive areas will remain eligible for competitive pricing and services from City authorized non-exclusive franchise haulers. The City's agreements with its non-exclusive haulers expire on June 30, 2017. Staff anticipates presenting those agreements separately for renewal consideration by the City Council in early 2017. Because the non-exclusive agreements cover areas of the City not subject to the existing exclusive franchise, those non-exclusive agreements have traditionally not been considered for a public competitive bidding process by the City. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement prior to the June 30, 2017 expiration of the existing non-exclusive agreements. Staff recommends addressing the non-exclusive franchise renewals by way of a separate process following a decision on the proposed new exclusive franchise agreement with WM. Note that prior to the June 28, 2016 City Council meeting, but after this report was prepared, a meeting was held with all non-exclusive franchise agreement haulers to discuss this issue. Any new information from that meeting will be presented as part of staff presentation at the June 28, 2016 public hearing.

From the outset, the key feature of negotiations with WM has been the City's interest to enhance services to the residential community as expressed by the City Council at its July 28, 2015 meeting and to extend to our residents the benefit (e.g. lower rates) that WM realizes from Irvine's growing residential customer base. Toward that end, the proposed new exclusive franchise agreement retains the provisions of the existing agreement, including low price guarantees for Irvine residents and village commercial businesses, and public education programs while enhancing services for which the City Council has expressed an interest, such as bulky item collection and programs necessary for City compliance with State waste diversion mandates.

The proposed agreement is expected to continue to generate annual franchise fee revenues to the City's General Fund of approximately $600,000 (consistent with existing franchise fee levels) and provides for sharing in 50% of profits from revenue generated from anticipated future City-approved planned residential and village commercial growth. It is proposed that the City receive its share of this profit in the form of reduced rates for curbside residential customers, valued at more than $2.1 million over the proposed 10-year term of the agreement.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On June 20, 2016 the Finance Commission voted 4-0-1 (Chair Dressler, Commissioners Koh, Montgomery and Reyno voting yes and Vice Chair Bartlett was absent) to recommend the City Council award a new exclusive franchise to Waste Management Collection & Recycling, Inc. dba Waste Management of Orange County

for solid waste handling services to residential and village commercial premises in the City.

ANALYSIS

As previously directed by the City Council, staff and WM representatives, with assistance from the City Attorney's office, have negotiated terms for a proposed new exclusive waste collection franchise agreement for consideration by the City Council. The terms of the proposed new agreement retain the favorable provisions contained in the existing franchise agreement while augmenting provisions to address new state laws and specified City Council expressed interests for program enhancements. The following is a summary of the proposed terms and conditions for City Council consideration:

1. **Term:** A new ten-year term from September 1, 2016 to August 31, 2026.

2. **Franchise Area:** All residential premises and designated Village Commercial premises. All other areas will continue to be covered by the City's non-exclusive franchise agreements that provide for competitive waste hauler pricing and services.

3. **Retention of Existing Agreement Benefits:**
   a. Guaranteed lowest curbside residential rate in Orange County. This rate is based on an annual rate survey as shown in Attachment 4.
   b. A guaranteed maximum rate for all multi-family residential properties and commercial properties within the designated village commercial franchise area that is within the lowest third of commercial rates in Orange County. This rate is based on an annual rate survey as shown in Attachment 5.
   c. Free recycling collection for all curbside residential premises and village commercial properties located within the franchise area.
   d. Funding for public education programs.
   e. Development planning assistance.
   f. Free waste collection services to all City facilities and public parks.
   g. A reduced curbside residential rate for low volume waste generators and a discounted senior rate, based on an annual rate survey as shown in Attachment 4.
   h. 5% franchise fee.

4. **Profit Revenue Sharing:** Half of WM profit revenue from anticipated new planned residential and village commercial growth will be credited to Irvine residents resulting in a monthly rate reduced from the current rate (estimated by WM at 30-cents per month, from $11.79 to $11.49). Over the term of the agreement this results in WM sharing $2.1 million of profits from its revenue with Irvine residents.

5. **Multi-Family Bulky Item Collection:** Enhanced program available for residents at multi-family complexes (subject to private property management approval) providing free monthly collection on pre-announced dates coordinated with each complex.

6. **Single-Family Bulky Item Collection:** Increased program frequency from two to four free bulky item curbside collection service calls annually.

7. **Assisted Services for Qualified Customers:** "Walk out service" for disabled persons and senior citizens needing assistance moving waste and recycling carts to and from the curbside for collection. This new service includes free curbside collection of Household Hazardous Waste, eliminating the need for qualifying residents to load and transport materials to County collection facilities.

8. **Sharps Program:** Medical Sharps Kits will be provided, upon request, for collection and proper disposal of medical needles. Each kit will include a self-addressed pre-paid postage mailer to facilitate delivery to an authorized processor.

9. **AB 341 Commercial Recycling Compliance:** Continued free recycling programs for village commercial properties within the exclusive franchise area, and new expanded outreach and compliance assistance with State law AB 341 mandating commercial recycling statewide.

10. **Organics Program:** A competitive initial (year 1 - 3) organics waste rate for businesses in the designated village commercial franchise area that are required to comply with State law AB1826 mandating certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper), and a guarantee to be in the lowest third of rates charged in all other Orange County cities with similar services in years 4 – 10.

11. **Village Commercial Map:** The existing franchise agreement includes a map (Attachment 3) depicting certain commercial areas ("Village Commercial Premises") subject to the existing franchise provisions of the agreement. The same map is used in the new agreement. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. The proposed new agreement provides a framework for updating the existing map to account for future village commercial development and build-out of the City's Great Park property.

12. **Biennial Review:** Scheduled performance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws. Service complaints must be immediately addressed by WM.

13. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than Waste Management of Orange County will require City Council approval of the contract assignment.

The City's Charter requires that any franchise granted by the City Council be authorized pursuant to an ordinance. The recommended ordinance and accompanying Franchise Agreement (Attachment 6) is presented for consideration by the City Council for this purpose. The proposed ordinance becomes effective 30-days after a second reading tentatively scheduled for July 12, 2016.

ALTERNATIVES CONSIDERED

The City Council could elect not to grant the proposed franchise to WM and instead direct staff to initiate a competitive bid process for exclusive waste handling services. This alternative is not recommended because the proposed terms negotiated with WM

ATTACHMENTS

1. June 14, 2016 Staff Report with Errata
2. July 28, 2015 Staff Report and Meeting Minutes
3. Existing Village Commercial Map
4. Annual Curbside Residential Rate Survey, August 2015
5. Annual Commercial Rate Survey, August 2015
6. Proposed City Council Ordinance and Franchise Agreement

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NONEXCLUSIVE FRANCHISE AGREEMENT FOR COMMERCIAL SOLID WASTE COLLECTION

BETWEEN THE CITY OF IRVINE AND

_____

EFFECTIVE DATE:

_____

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NONEXCLUSIVE FRANCHISE AGREEMENT

This Nonexclusive Franchise Agreement ("Agreement") is entered into and effective as of _____, __, 2017, by and between the CITY OF IRVINE, a California municipal corporation ("City") and _____ ("Franchisee"), relating to the provision of certain Solid Waste Handling Services within the City which are not subject to City's Exclusive Franchise Agreement. City and Franchisee are referred to herein collectively as the "Parties" and individually as a "Party."

RECITALS

A. The Legislature of the State of California, by enactment of the California Integrated Waste Management Act of 1989 ("AB 939"), has declared that it is in the public interest to authorize and require local agencies to make adequate provision for the disposal of all Solid Waste within their jurisdictions. AB 939 requires, among other things, that every local agency Divert at least fifty percent (50%) of its Solid Waste from Landfills by the year 2000 or face possible fines of up to Ten Thousand Dollars ($10,000) per day.

B. City previously entered several nonexclusive franchise agreements with various franchisees, approved by City's City Council on November 27, 2007 (the "Prior Agreement").

C. The Prior Agreement expires on December 31, 2017, and the Parties enter this Agreement with the intent of restating and amending the Prior Agreement to: (i) reflect service standards and legal requirements in the Solid Waste industry which have changed over time, (ii) document agreed upon changes to the scope of the nonexclusive franchise granted in the Prior Agreement, and (iii) memorialize that this Agreement shall supersede the Prior Agreement, except with respect to certain continuing obligations as more specifically set forth herein.

D. It is the intent of the Parties that Franchisee, and not City, shall be solely responsible for establishing and collecting all charges for Solid Waste Handling Services provided by Franchisee pursuant to this Agreement.

E. City and Franchisee are mindful of the provisions of the laws governing the safe Collection, transport, Recycling, and disposal of Solid Waste, including AB 939, AB 341, AB 1594, AB 1826, RCRA, and CERCLA. City and Franchisee desire to leave no doubts as to their respective roles, and to memorialize that by entering into this Agreement City is not thereby becoming an "arranger" or a "generator" as those terms are used in CERCLA, and that it is Franchisee, not City, who is "arranging for" the Collection, transport for disposal, composting, and Recycling of municipal Solid Waste in the City which may contain Hazardous Substances. City and Franchisee understand and agree that it is Franchisee, and not City, who will arrange to collect Solid Waste, that City has not, and, by this Agreement does not, instruct Franchisee on its Collection methods, nor supervise the Collection process, nor do the Parties intend to place title to such Solid Waste in City, but rather intend that whatever, if any, title in and to such Solid Waste that otherwise might exist in or with City in the absence of this Agreement is hereby transferred to Franchisee, and further that if Franchisee gains title to such Solid Waste it is by operation of law and agreement with its Customers and is not the result of this Agreement. By entering this Agreement, City and Franchisee further desire to confirm that Franchisee has agreed to indemnify

City in connection with any claims relating to the inadvertent or intentional collection, transportation and/or disposal by Franchisee of Hazardous Contaminants that may occur in connection with Franchisee's performance under this Agreement in accordance with the terms and conditions set forth herein.

F. To comply with the Diversion requirements of AB 939 and support "Zero Waste" principles, as adopted by the City Council on July 10, 2007, pursuant to Irvine City Council Resolution No. 07-95, while at the same time fostering competition, City deems it necessary to implement a program, as reflected by this Agreement, to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and Recycling.

G. By entering into this Agreement, Franchisee agrees to provide such Services as are necessary to ensure City complies with the requirements of all Applicable Laws including specifically, without limitation, AB 939, AB 341, AB 1826, and Public Resources Code Section 40000, et seq., in connection with the Solid Waste Handling Services it provides hereunder, and represents and warrants that it has the experience and qualifications to conduct the services detailed herein.

H. The City Council hereby determines and finds that the public interest, health, safety and wellbeing will be served by entering this Agreement.

COVENANTS

Based upon the foregoing Recitals and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1
RECITALS

The Parties acknowledge the above Recitals are true and correct and incorporate them herein as if they were fully restated.

SECTION 2
DEFINITIONS

Whenever any term used in this Agreement has been defined by the California Public Resources Code or the Municipal Code, the definition of such term set forth therein shall apply unless the term is otherwise defined in this Agreement; and, terms defined in this Agreement shall have such meaning as defined in this Agreement for purposes of this Agreement. Otherwise, terms used in this Agreement shall have their ordinary meaning.

2.1 AB 341. "AB 341" shall mean Assembly Bill 341 from the 2011-2012 Regular Session of the California Legislature (Chapter 476, Statutes 2011), relating to mandatory commercial Recycling.

2.2 AB 939. "AB 939" shall mean the California Integrated Waste Management Act of 1989, currently codified as California Public Resources Code Section 40000 et seq., as it may be amended from time to time.

2.3 AB 1594. "AB 1594" shall mean Assembly Bill 1594 from the 2013-2014 Regular Session of the California Legislature (Chapter 719, Statutes 2014), relating to the ban on the use of Green Waste as alternative daily cover at landfills.

2.4 AB 1826. "AB 1826" shall mean Assembly Bill 1826 from the 2013-2014 Regular Session of the California Legislature (Chapter 727, Statutes 2014).

2.5 Animal Waste. "Animal Waste" shall mean animal carcasses, dead animals, and/or parts or portions of dead animals. Animal Waste shall not include manure.

2.6 Annual Report. "Annual Report" shall have the meaning ascribed in Section 10.1 of this Agreement.

2.7 Applicable Laws. "Applicable Laws" shall mean all federal, state, county, and local laws, regulations, rules, orders, judgments, decrees, permits, approvals, or other requirements of any governmental agency having jurisdiction over an aspect of this Agreement that are in force on the Effective Date, and as may be enacted, issued or amended thereafter, including without limitation City's Municipal Code, AB 341, AB 939, AB 1594, AB 1826, CERCLA, and RCRA.

2.8 Bins. "Bins" shall mean dumpsters, three yard bins, Recycling Bins, 10, 36 and 40 yard Roll-Off Boxes, commercial compactors, 10 yard lowboy containers, and any similar such devices, regardless of size or capacity, provided by Franchisee to any Customer for use in Solid Waste Handling Services.

2.9 CalRecycle. "CalRecycle" shall mean the State of California Department of Resources Recycling and Recovery, the department within the State Natural Resources Agency responsible for the administration of the Integrated Waste Management Act of 1989, California Public Resources Code Section 40000 et seq.("Act"), or any successor department or agency created or designated for such purpose pursuant to the Act.

2.10 CDI Processing Facility. "CDI Processing Facility" shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of Recycling or reuse.

2.11 CERCLA. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC §9601 et seq.).

2.12 City. "City" shall mean the City of Irvine, a municipal corporation, located in Orange County, California.

2.13 City Council. "City Council" shall mean the City Council of the City of Irvine.

2.14 City Indemnitees. "City Indemnitees" shall mean the City and its past and present elected and appointed officials, officers, commissions, boards, members, employees, representatives, agents, consultants, and volunteers.

2.15 City Limits. "City Limits" shall mean the territorial boundaries of the City together with all amendments and changes thereto, which boundaries are depicted on maps, incorporated herein by reference, that are kept on file in the office of the City Clerk of the City of Irvine, and which are from time to time amended to reflect changes.

2.16 City Manager. "City Manager" shall mean the City Manager of the City of Irvine or his or her designee.

2.17 Collect/Collection. "Collect" or "Collection" shall mean to take physical possession of, transport, and remove (i) Solid Waste from a Premises, or (ii) any other materials that do not otherwise constitute Solid Waste, but that are discarded by a Customer pursuant to this Agreement.

2.18 Collection Vehicles. "Collection Vehicles" shall mean vehicles used by Franchisee in the performance of Solid Waste Handling Services.

2.19 Commercial Premises. "Commercial Premises" shall mean property upon which a business activity is conducted, including but not limited to retail sales, services, manufacturing, assembling, storage, or wholesale operations, but excluding businesses conducted upon residential premises that are permitted under applicable zoning regulations and that do not constitute the primary use of the property. Commercial Premises include hotels, motels, assisted living facilities, convalescent centers, nursing homes, and institutional premises, including, without limitation, churches and private schools.

2.20 Construction and Demolition (C&D) Debris. "Construction and Demolition Debris" or "C&D Debris" shall mean Solid Waste generated, produced, or discarded in connection with construction, demolition, landscaping, land clearing, or general clean-up activities within the City, including, but not limited to, concrete, plaster, drywall, Green Waste, wood, wood scraps, metals, dirt, rock and rubble, without regard to whether such materials are Recycled.

2.21 County Agreement. "County Agreement" shall mean that certain Waste Disposal Agreement, as the same may be amended from time to time, entered into among various Orange County cities, including specifically the City of Irvine, and the County of Orange relating to the use of County landfills for the disposal of Solid Waste Collected in such cities, and which is on file in the office of the Clerk of the City of Irvine.

2.22 Customer. "Customer" shall mean any person or entity receiving Solid Waste Handling Services, including Recycling services, from Franchisee pursuant to this Agreement.

2.23 Diversion. "Diversion" or "Divert" shall mean the diversion of Solid Waste, in accordance with all applicable federal, state and local requirements, from disposal at Solid Waste Landfills or transformation facilities through Recycling, reuse, or composting.

2.24 Division 7. "Division 7" shall mean Title 6, Division 7 of City's Municipal Code, pertaining to Solid Waste, as it may be amended or recodified from time to time.

2.25 Dwelling Unit. "Dwelling Unit" shall have the meaning set forth in City Zoning Code Section 1-2-1, as of the Effective Date.

2.26 Effective Date. "Effective Date" shall mean October 26, 2017.

2.27 Environmental Laws. "Environmental Laws" shall mean all federal and state statutes, county, local and City ordinances concerning public health, safety and the environment including, by way of example and not limitation, CERCLA; RCRA; the Federal Clean Water Act, 33 USC §1251 et seq.; the Federal Clean Air Act, 42 USC §7401 et seq.; the Toxic Substances Control Act, 15 USC §2601 et seq.; the Occupational Safety and Health Act, 29 USC §651 et seq.; the California Hazardous Waste Control Act, California Health and Safety Code §25100 et seq.; the Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health and Safety Code §25300 et seq.; the Porter-Cologne Water Quality Control Act, California Water Code §13000 et seq.; the Safe Drinking Water and Toxic Enforcement Act, California Health and Safety Code §25249.5 et seq.; as currently in force or as hereafter amended, and all rules and regulations promulgated thereunder.

2.28 Exclusive Franchise Agreement. "Exclusive Franchise Agreement" shall mean that certain agreement with Waste Management Collection & Recycling, Inc., a California corporation, dba Waste Management of Orange County ("Waste Management"), or its permitted successor or assignee, effective as of September 1, 2016, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential Premises and Village Commercial Premises in the City, and all Premises and facilities owned and/or operated by City or, if such agreement is terminated prior to the end of the term thereof, an agreement entered into with another hauler on substantially similar terms as are set forth in the above-described agreement with Waste Management.

2.29 Exclusive Franchisee. "Exclusive Franchisee" shall mean the franchisee set forth in the Exclusive Franchise Agreement.

2.30 Exclusive Franchise Premises. "Exclusive Franchise Premises" shall mean those Premises subject to the Exclusive Franchise Agreement, and specifically all Residential Premises, all Village Commercial Premises (which term is defined to include all Mixed-Use Developments), and all Premises owned and/or operated by City.

2.31 Food Waste. "Food Waste" shall mean compostable Organic materials, excluding Green Waste, including but not limited to: (i) all food (including fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells); (ii) food-soiled compostable paper (including napkins, paper towels, paper plates); and (iii) tea bags, coffee grounds and filters.

2.32 Franchisee. "Franchisee" shall mean the entity identified as the "Franchisee" in the preamble to this Agreement, or any entity pursuant to the terms hereof permitted to become the successor or assignee thereof.

2.33 Franchise Fee. "Franchise Fee" shall mean the franchise fee set forth herein and more fully defined in Section 7.

2.34 Generator. "Generator" shall mean any person or entity that generates, produces, or discards Solid Waste, including Recyclable Material.

2.35 Green Waste. "Green Waste" shall mean any plant material that is kept separate from other Solid Waste at the point of generation and contains no greater than one percent (1%) of physical contaminants by weight. Green Waste includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and C&D Debris wood waste. Green Waste does not include food, food materials, biosolids, plant material mixed with Solid Waste, material processed from commingled waste, wood containing lead-based paint or wood preservative, or mixed C&D Debris.

2.36 Green Waste Composting Facility. "Green Waste Composting Facility" shall mean a Processing Facility that receives and processes Green Waste for the purposes of recycling or reuse. A Green Waste Composting Facility may also handle manure and paper products. A Processing Facility that handles feedstock that is not a Green Waste, manure, or a paper product shall not be considered a Green Waste Composting Facility.

2.37 Gross Receipts. "Gross Receipts" shall mean and include all monies, fees, charges, consideration, and revenue received by, or imputed to Franchisee and any affiliates, parent companies, subsidiaries and/or subcontractors of Franchisee, in connection with, arising from, or in any way attributable to the services carried out by or on behalf of Franchisee pursuant to this Agreement. Gross Receipts includes, without limitation, any amounts Collected by Franchisee from its Customers which reflects Tipping Fees or other costs incurred by Franchisee to provide services pursuant to this Agreement. As qualified exceptions to the above definition, and except as otherwise note below, Gross Receipts shall not include:

(a) Amounts Collected by Franchisee from its Customers which reflect that portion (if any) of the Franchise Fees imposed upon Franchisee by City which Franchisee may choose to pass on to its Customers; provided, however, any such amounts which exceed a Customer's pro-rata share of the Franchise Fee actually imposed upon Franchisee by City shall not be exempted from the definition of Gross Receipts.

(b) Revenue from the resale of Recyclable Materials.

2.38 Hazardous Contaminant. "Hazardous Contaminant" shall mean any "hazardous material," as that term is defined under California Health & Safety Code Section 25501(n); any "hazardous substance," as that term is defined herein or under California Health & Safety Code Sections 25281(h), 25501(n), and under Title 42, Section 9601(14) of the United States Code; any "hazardous waste," as that term is defined herein and under Title 42, Section 6903(5) of the United States Code and under California Health & Safety Code Section 25501(n); any chemical which the Governor has identified as a chemical known to the State to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term "Hazardous Contaminant" shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.

2.39 Hazardous Substance. "Hazardous Substance" shall mean any of the following: (a) any substances defined, regulated or listed (directly or by reference) as "Hazardous Substances," "hazardous materials," "Hazardous Wastes," "toxic waste," or "toxic substances" or similarly identified as hazardous to human health or the environment, in or pursuant to (i) CERCLA; (ii) the Hazardous Materials Transportation Act, 49 USC §5101, et seq.; (iii) RCRA; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7401 et seq.; and (vii) the California Water Code §13050; (b) any substances identified in any and all amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified and/or regulated as hazardous or toxic under any other applicable federal, state or local laws or regulations, including any of the Environmental Laws, currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl's ("PCBs"), petroleum, natural gas and synthetic fuel products, and by-products.

2.40 Hazardous Waste. "Hazardous Waste" shall mean all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code §25110.02, §25115, and §25117 or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to RCRA, all future amendments thereto, and all rules and regulations promulgated thereunder.

2.41 HHWE. "HHWE" shall mean City's Household Hazardous Waste Element approved by the State of California pursuant to the requirements of AB 939.

2.42 Inert Debris. "Inert Debris" shall mean Solid Waste that is Source-Separated or separated for reuse; does not contain Hazardous Waste, Hazardous Contaminants, Hazardous Substances, or soluble pollutants at concentrations in excess of water quality objectives set by applicable Federal, State, and local authorities, including the City; and does not contain significant quantities of decomposable waste. Inert Debris may not contain more than 1% putrescible waste by volume calculated on a monthly basis, and the putrescible wastes shall not constitute a nuisance, as determined by the City Manager.

2.42.1 Type A Inert Debris. "Type A Inert Debris" shall mean C&D Debris, including but not limited to concrete, fully cured asphalt, glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products, that meets the definition of "Inert Debris."

2.43 Landfill. "Landfill" shall mean a Solid Waste landfill as defined by Public Resources Code Section 40195.1 for which a current Solid Waste facilities permit has been issued by CalRecycle or which is currently permitted under the regulatory scheme of another state.

2.44 Material Recovery Facility (MRF). "Material Recovery Facility (MRF)" shall mean a Processing Facility permitted by the State of California where Solid Waste and/or Recyclable Materials are sorted or separated, by hand or by use of machinery, for the purpose

of Recycling, reuse, and/or composting, and which can reasonably demonstrate through documentation an average annual Diversion rate of at least fifty percent (50%).

2.45 Medical Waste. "Medical Waste" shall mean waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including, without limitation, blood-soaked bandages, culture dishes and other glassware, discarded surgical gloves, discarded surgical instruments, discarded needles used to give shots or draw blood (e.g., medical sharps), cultures, stocks, swabs used to inoculate cultures, removed body organs (e.g., tonsils, appendices, limbs), and discarded lancets.

2.46 Mixed-Use Development. "Mixed-Use Development" shall mean Premises where Bins are shared by Customers from both Commercial Premises and Multi-Family Dwellings. Mixed-Use Developments shall be deemed to be Village Commercial Premises for purposes of this Agreement. The term Mixed-Use Development has been defined for purposes of this Agreement, and is specifically intended to have a different definition and meaning than the term "Mixed-use development" as set forth and defined in City's Municipal Code.

2.47 Multi-Family Dwelling. "Multi-Family Dwelling" shall mean any building or lot containing more than one Dwelling Unit and at which the Dwelling Units receive Solid Waste Handling Services through the use of shared Bins pursuant to the terms of the Exclusive Franchise Agreement.

2.48 Municipal Code. "Municipal Code" shall mean City's Municipal Code of Ordinances, including City's Zoning Code, and all uncodified ordinances duly adopted by City, as such may be amended from time to time.

2.49 NPDES. "NPDES" shall mean the National Pollutant Discharge Elimination System, a permit program established by the 1987 Water Quality Act to control non-point source pollution.

2.50 Organics. "Organics" shall mean Food Waste and Green Waste.

2.51 Premises. "Premises" shall mean any land, building and/or structure, or portion thereof, in the City where Solid Waste is produced, generated or accumulated.

2.52 Processing Facility. "Processing Facility" shall mean a facility approved pursuant to Section 3.6 of this Agreement that receives or processes Solid Waste, including but not limited to MRF's.

2.53 RCRA. "RCRA" shall mean the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. § 9601 et seq.).

2.54 Recycle or Recycling. "Recycle" or "Recycling" shall mean the process of Collecting, sorting, cleaning, treating and/or reconstituting materials that would otherwise be disposed of and returning these materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products.

2.55 Recyclable Material (Recyclables). "Recyclable Material" or "Recyclables" shall mean that Solid Waste discarded within Premises that are subject to this Agreement and which is capable of being Recycled.

2.56 Residential Premises. "Residential Premises" shall mean all Premises upon which Dwelling Units exist.

2.57 Solid Waste. "Solid Waste" shall mean and include all discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction waste, industrial waste, commercial Solid Waste, bulky items, and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of "Nonhazardous Solid Waste" set forth in the California Code of Regulations, as it may be amended from time to time. Solid Waste does not include Hazardous Contaminants, Hazardous Substances, Hazardous Waste, low-level radioactive waste, untreated Medical Waste, or Special Wastes.

2.58 Solid Waste Handling Services. "Solid Waste Handling Services" shall mean the Collection, and thereafter the transfer, transport, Recycling, processing, and disposal of Solid Waste.

2.59 Source Reduction. "Source Reduction" shall mean the process of reducing the amount of Solid Waste generated by the person or organization generating such Solid Waste.

2.60 Source Separation. "Source Separation" or "Source-Separated" describes the segregation of Recyclable Materials from other Solid Waste by the Generator, combined with Franchisee's use of a collection process for such segregated Recyclable Materials by which they are kept segregated and are delivered to a Processing Facility for Recycling purposes, or to another destination for Recycling, reuse, or end-use purposes.

2.61 Special Wastes. "Special Wastes" shall mean waste materials including sewage, sludge, industrial sludge, asbestos, auto bodies, tires, used motor oil, Animal Waste, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling.

2.62 SRRE. "SRRE" shall mean City's Source Reduction and Recycling Element approved by the State of California pursuant to the requirements of AB 939.

2.63 State-Mandated Compliance Reports. "State-Mandated Compliance Reports" shall mean all reports required for City to meet its reporting obligations imposed by statutory mandates, including, but not limited AB 939, AB 341, and 1826, and the regulations implementing such mandates.

2.64 Temporary Bin Service. "Temporary Bin Service" shall mean Solid Waste Handling Services provided by a Solid Waste enterprise on an as needed and temporary basis to any Premises within the City in connection with, including but not limited to, construction, demolition, cleanup or other projects that do not qualify as a "Covered Project" pursuant to Section 6-7-901 of the Irvine Municipal Code, and by use of temporarily placed Bins.

2.65 Term. "Term" shall have the meaning ascribed in Section 5 of this Agreement.

2.66 Tipping Fee. "Tipping Fee" shall mean the fee charged to Franchisee to dispose of Solid Waste at a Landfill, Processing Facility, or other disposal location.

2.67 Transformation. "Transformation" shall mean incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. "Transformation" does not include composting.

2.68 Village Commercial Premises. "Village Commercial Premises" shall mean that subset of Commercial Premises which have been designated by City as falling within the scope of the Exclusive Franchise Agreement, and which the Parties agree are not within the scope of the nonexclusive franchise granted by this Agreement. The specific Commercial Premises which are designated as Village Commercial Premises for purposes of this Agreement are (i) those Commercial Premises which are located in areas designated as "Exclusive Village Commercial" on the Village Commercial Premises Map, attached hereto as Exhibit A; (ii) Mixed-Use Developments, whether currently in existence or developed in the future, which are deemed for purposes of this Agreement to be Village Commercial Premises, regardless of their location and whether or not said location is designated as "Exclusive Village Commercial" on the Village Commercial Premises Map; and (iii) any Commercial Premises within Planning Area 51 that is re-designated following the Effective Date to a Village Commercial Premises designation as a result of an amendment to the Village Commercial Premises Map pursuant to the terms hereof. Notwithstanding anything herein to the contrary, Village Commercial Premises shall not include hotels, motels, assisted living facilities, convalescent centers or nursing homes, regardless of their location.

2.69 Village Commercial Premises Map. "Village Commercial Premises Map" shall mean the map attached hereto as Exhibit A, titled "Commercial Solid Waste Collection Service Areas." The purpose of the Village Commercial Premises Map is to designate which Commercial Premises are designated as "Exclusive Village Commercial" Premises for purposes of this Agreement, and are thereby within the scope of the Exclusive Franchise Agreement and conversely outside of the scope of the nonexclusive franchise granted by this Agreement. The Village Commercial Premises Map is not intended to identify the location of Residential Premises, including Premises at which Mixed-Use Developments exist; and, accordingly, Mixed-Use Developments (which are deemed to be Village Commercial Premises) may exist in areas designated as "Nonexclusive Commercial" on the Village Commercial Premises Map.

SECTION 3
NONEXCLUSIVE FRANCHISE

3.1 Grant of Franchise.

3.1.1 General Grant. City hereby grants to Franchisee, and Franchisee shall have throughout the duration of this Agreement, the nonexclusive franchise, right, license and privilege to provide Solid Waste Handling Services within the City Limits, with respect to Solid Waste not subject to the Exclusive Franchise Agreement. Generally speaking, the rights granted

herein pertain to: (1) Solid Waste Handling Services to Commercial Premises, excepting Village Commercial Premises, occurring on a regular schedule (such as weekly service); and (2) Temporary Bin Services to any Premises in the City (including Exclusive Franchise Premises). In the event of any uncertainty, ambiguity, and/or dispute as to whether a particular Premises is subject to the Exclusive Franchise Agreement, the determination shall be made by the City Manager, and such determination shall be final. The Parties agree that any such determination is occurring pursuant to Public Resources Code Section 49523, is agreed to by the Parties upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement.

3.1.2 Amendments to Scope of Franchise: The Parties acknowledge that as of the Effective Date, the Village Commercial Premises Map includes that certain land area located in the City's Great Park known as "Planning Area 51" and further shows a current conceptual plan by which to divide Planning Area 51 into individual "Districts." The City has not yet finalized its plans for Planning Area 51, and final Districts and boundaries therefore have yet to be established. Once the final planning for Planning Area 51 is complete, the Village Commercial Premises Map will be amended to depict those premises within Planning Area 51 that are designated as "Exclusive Village Commercial" Premises and those which are designated as "Nonexclusive Commercial" Premises. As of the Effective Date (but subject to change in the future as final plans for Planning Area 51 develop), it is anticipated that land currently shown as Districts 1, 4, 5, 7 and 8 within Planning Area 51 will be developed primarily for residential purposes, and accordingly City anticipates such Districts within Planning Area 51 will be designated as Village Commercial Premises. Moreover, City anticipates that land shown as Districts 2, 3, and 6 within Planning Area 51 will not be developed for residential purposes, and accordingly City does not anticipate designating such Districts within Planning Area 51 as Village Commercial Premises. City shall have the exclusive right to exercise its discretion to determine whether to designate properties within Planning Area 51 as Village Commercial Premises, although in doing so City will bear in mind the following: (i) City's primary consideration will be to minimize Collection Vehicle traffic in Residential Premises; (ii) the Village Commercial Premises designation is intended to apply to Premises located in close proximity to residential areas, which are established to provide for the unified commercial needs of neighborhood residents. Franchisee agrees that City may amend the Village Commercial Premises Map from time to time to reflect changes to Planning Area 51 as its planning is finalized by City, and that such changes will be reflected on amended maps to be maintained by the City Manager. Moreover, the Parties agree that any such changes effectuated by such amendments to the Village Commercial Premises Map are occurring pursuant to Public Resources Code Section 49523, are agreed to by the Parties upon mutually satisfactory terms, and are part of the consideration for entering into this Agreement. Franchisee expressly acknowledges that any change in scope of the franchise granted hereunder that may occur during the term hereof as a result of a change to the Village Commercial Premises Map as described in this Section is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524.

3.1.3 Encroachment on Public Rights-of-Way. Included in the rights granted hereunder, is the right for Franchisee to place Bins in City's public rights-of-way, subject to the provisions of Division 7.

3.2 Limitations on Scope of Franchise.

3.2.1 Nonexclusive. This Agreement shall be nonexclusive, and no provision hereof shall be deemed to require City to grant similar franchises to one or to any particular number of franchisees, nor to restrict or prohibit City from doing so. Franchisee understands and acknowledges City may enter similar nonexclusive franchise agreements pursuant to the same, or substantially similar terms, with any qualified Solid Waste enterprise.

3.2.2 Exclusions. Notwithstanding any other provisions set forth in this Agreement to the contrary, the nonexclusive contract, right, franchise, license, and privilege granted herein excludes:

(a) Solid Waste Handling Services for Exclusive Franchise Premises as defined by this Agreement.

(b) except as provided otherwise herein, the Collection, transportation, or disposal of Hazardous Contaminants; Hazardous Substances; Hazardous Waste; items commonly known in the waste industry as "universal waste" and/or "e-waste"; biohazardous waste; untreated Medical Waste; infectious waste; Animal Waste; used cooking fats, oils, grease and similar waste; Special Waste; or other materials which do not constitute Solid Waste.

(c) Those Solid Waste Handling Services, if any, which are governed by or subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.3 Rights in Annexed Territories. It is the intention of the Parties that, subject to all of the limitations set forth in Section 3.2 above, the nonexclusive franchise granted herein shall apply to any property incorporated into the City Limits during the Term hereof; provided, however, the exercise of the rights granted herein within annexed territories shall be limited by and subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.4 Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523. If Franchisee has a pre-existing permit, license, agreement, franchise or other rights to provide services in the City, including because of being a Franchisee under the Prior Agreement, then Franchisee expressly acknowledges that any change or modification to the scope of such rights that may be effectuated by this Agreement is occurring pursuant to Public Resources Code Section 49523, is included herein upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement. Moreover, Franchisee expressly acknowledges that any change in scope of such prior rights is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524. Franchisee acknowledges that City has advised it that if it has rights pursuant to Public Resources Code Section 49520 which it does not wish

to modify by entering this Agreement, it may choose to continue to operate in City pursuant to such rights rather than enter into this Agreement.

3.5 Notice Pursuant to Public Resources Code Section 49520. The rights granted pursuant to the terms hereof shall expire upon the end of the Term of this Agreement as set forth in Section 5 below. Franchisee shall have no right to continue to provide services in City pursuant to Public Recourses Code Section 49520, or otherwise, following the end of the Term hereof unless a subsequent franchise, contract, or permit is granted to Franchisee by City, or unless this Agreement is amended to provide such rights. This provision is intended to, and shall serve as the notice contemplated by Section 49520 with respect to the franchise rights granted herein.

3.6 Processing Facility Approval.

3.6.1 Approval Required. In order for a Processing Facility to qualify as a CDI Processing Facility, Green Waste Composting Facility, or MRF for purposes of the Franchise Fee calculation, the Processing Facility must be approved by the City pursuant to this Section 3.6 at all relevant times. Facilities that are not approved pursuant to this Section 3.6 at all relevant times shall be considered "other disposal facilities" for purposes of the Franchise Fee calculation.

3.6.2 Processing Facility Audit. City reserves the right to the full extent permissible by law to deny approval to any Processing Facility that does not permit City to audit the Processing Facility for appropriate Franchise Fee and Diversion allocations. The audit may include, but is not limited to, requests for a detailed summary of the facility operations, visual inspections of the facility's sorting and other processes, reviews of Diversion calculation methodology, and requests for an adequate explanation of the selection process of loads to be sorted or directed for disposal.

3.6.3 Other Jurisdiction Approval. If another jurisdiction has provided written approval to a particular Processing Facility, the City may, but is not required to, accept this approval in lieu of its own approval process.

3.6.4 Processing Facility Approval List. Upon request, Franchisee may obtain an approved Processing Facility list from the City Manager. Any requested changes or additions to the approved Processing Facility list shall be submitted to the City Manager in writing. Franchisee must obtain the City Manager's written approval prior to Franchisee's use of any facility not appearing on the approved Processing Facility list.

3.6.5 Approval Timeframe. Processing Facility approval shall be at the sole discretion of the City Manager. Approval decisions shall be made in a timely manner following a request for approval. The City estimates typical approval review may take up to thirty (30) days. The City may provide temporary approval for facilities in cases where a lengthy audit or additional information is being prepared or reviewed.

SECTION 4
ACCEPTANCE; WAIVER

Franchisee agrees to be bound by and comply with all the requirements of this Agreement. Franchisee waives Franchisee's right to challenge the terms of this Agreement under federal, state, or local law, or administrative regulation. Additionally, by and upon the execution of this Agreement, Franchisee agrees to the termination of the Prior Agreement as of the Effective Date, agrees to waive any and all rights under the Prior Agreement, and agrees to release and hold the City harmless from any of the City's obligations thereunder (excepting, however, the right to compensation accrued and unpaid for services provided prior to the Effective Date); provided, however, nothing contained in this provision is intended to or shall relieve Franchisee from any obligation existing under the Prior Agreement pertaining to insurance, indemnification, or other legal obligations to City or Franchisee's Customers (as opposed to obligations to provide service pursuant to the terms thereof), or from any obligation set forth in the Prior Agreement which are called out as surviving the termination thereof, and all such obligations, including specifically those indemnification obligations relating to Environmental Laws, general liability, and AB 939 shall survive the termination of the Prior Agreement.

SECTION 5
TERM

The term of this Agreement shall commence on October 26, 2017 and end at midnight on August 31, 2026, unless this Agreement is terminated at an earlier date pursuant to Section 15 hereof, or otherwise.

SECTION 6
CONDITIONS TO EFFECTIVENESS OF AGREEMENT

The satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City in writing, is a condition precedent to the effectiveness of this Agreement:

6.1 Accuracy of Representation. All representations and warranties made by Franchisee and set forth in this Agreement shall be accurate, true, and correct on and as of the Effective Date of this Agreement.

6.2 Absence of Litigation. There shall be no litigation pending in any court challenging the award of this Agreement to Franchisee or the execution of this Agreement or seeking to restrain or enjoin its performance.

6.3 Furnishing of Insurance and Bond or Letter of Credit. Franchisee shall have furnished evidence of the insurance and Surety required by Section 14 hereof, and shall comply with all ongoing requirements relating thereto.

6.4 Effectiveness of City Council Action. The City Council Ordinance approving this Agreement shall have become effective pursuant to California law.

SECTION 7
FRANCHISEE'S CONSIDERATION

As part of its consideration for the nonexclusive franchise rights contained herein, Franchisee shall provide a Franchise Fee in compliance with this Section 7.

7.1 Franchise Fee Payment. Franchisee shall pay to City, in lawful money of the United States, the Franchise Fee as calculated pursuant to Section 7.2 during the entire Term of this Agreement. Said Franchise Fee shall be due to City in four (4) quarterly payments, which shall be due on or before the forty-fifth (45th) day after the end of each calendar quarter (January-March, April-June, July-September, October-December). The Franchise Fee shall be delivered to the City Manager on or before May 15, August 14, November 14, and February 14. Franchise Fee payments shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the amounts paid.

7.2 Franchise Fee Calculation. City intends the Franchise Fee calculation procedure to promote Diversion. Franchise Fee calculation is based on Franchisee's Gross Receipts and the percentage of Solid Waste Franchisee delivered to, and that was accepted by, various Processing Facilities and other disposal facilities during the immediately preceding calendar quarter. Franchise Fees due to the City shall be paid quarterly and accompanied by a calculation form developed and approved by the City, signed and completed by the Franchisee. The amount of Franchise Fees due to the City shall be determined by:

(a) calculating the total Gross Receipts derived from the Collection of Solid Waste in the City by Franchisee for the quarterly period;

(b) determining the percentage share of total Gross Receipts attributed to the Collection of Solid Waste according to the percentage of the total Collected Solid Waste delivered by Franchisee to each of the various Processing Facilities and other disposal facilities identified in this Section 7.2; and

(c) calculating and paying Franchise Fees on such Gross Receipts at the following rates based on the type of Processing Facility or other disposal facility utilized by the Franchisee during the quarter, such that on that portion of total Gross Receipts derived from Solid Waste Collected and delivered to:

(i) a Landfill, the Franchise Fee shall be 10%;

(ii) a MRF, the Franchise Fee shall be 3%;

(iii) a CDI Processing Facility, the Franchise Fee shall be 0%;

(iv) a Green Waste Composting Facility, the Franchise Fee shall be 0%;

(v) an end user approved by the City Manager in writing, the Franchise Fee shall be 0%; and

(vi) other disposal facilities, the Franchise Fee shall be 10%.

By way of example only, under the Franchise Fee calculation methodology described in this Section 7.2, a Franchisee that earns $60,000 in Gross Receipts by collecting 100,000 tons of Solid Waste in a given calendar quarter, and delivers half of the Collected waste tonnage to the Landfill and the other half of the Collected waste tonnage to a MRF, would pay a total of $3,900 in Franchise Fees (equal to a 10% Franchise Fee on that portion of the Gross Receipts attributed to Solid Waste landfilled and a lower 3% Franchise Fee on that portion of Gross Receipts attributed to Solid Waste delivered by Franchisee to a MRF.

7.3 Franchise Fee Review. The Franchise Fee calculation percentages specified in Section 7.2 will be reviewed by City on an ongoing basis, but not more often than annually, and if deemed necessary or appropriate by City, may be reduced or increased by approval of the City Council. City shall provide Franchisee with ninety (90) days advance written notice of any fee adjustment before such an adjustment shall take effect.

SECTION 8
ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS

In the event Franchisee fails to make any of the payments provided for in this Agreement on or before the dates due, Franchisee shall pay as consideration the following amounts:

8.1 A sum of money equal to the Franchise Fee due;

8.2 A sum of money equal to five percent (5%) of the amount due. This amount is required in order to defray those additional expenses and costs incurred by City by reason of the delinquent payment including, but not limited to, the cost of administering, accounting for, and collecting said delinquent payment and the cost to City of postponing services and projects necessitated by the delay in receiving the revenue; and

8.3 Interest on the delinquent sum (excluding the late payment charge referred to in Section 8.2) at the maximum legal rate, with said sum to be applied as interest for loss of use of the money due and to be calculated commencing on the date first due through and including the date upon which full payment, including all interest and penalties, is made.

SECTION 9
OPERATING PROCEDURES

9.1 General. Franchisee shall furnish all labor, supervision, materials, supplies, and equipment necessary to provide Solid Waste Handling Services in accordance with the terms of this Agreement.

9.2 Compliance with Applicable Laws. Franchisee shall fully comply with all Applicable Laws, including without limitation, Division 7 as it may be amended from time to time. Franchisee shall obtain and maintain, at Franchisee's sole cost and expense, all permits and licenses applicable to Franchisee's operations under this Agreement, including specifically, without limitation, a City of Irvine Business License.

9.3 Vehicles and Equipment. All Collection Vehicles and all Bins used by Franchisee in the performance of Solid Waste Handling Services hereunder shall comply with the vehicle and equipment requirements set forth in Division 7 and the provisions of this Section 9.

9.3.1 General Requirements for Collection Vehicles. All Collection Vehicles shall comply with all rules and regulations of the South Coast Air Quality Management District, the Air Resource Board, and any other regulatory body that may be in effect during the Term of this Agreement, as well as other federal, state and local laws and regulations that may be enacted during the Term of this Agreement. All Collection Vehicles shall meet or exceed such air quality standards as may be adopted by the forgeoing regulatory bodies during the Term. All Collection Vehicles shall comply with the requirements in the South Coast Air Quality Management District's ("SCAQMD") Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles).

9.3.2 Specific Requirements for Collection Vehicles. Each Collection Vehicle utilized by Franchisee in the performance of Solid Waste Handling Services shall meet the following minimum standards:

(a) Each Collection Vehicle shall be fueled by clean air technology in accordance with Applicable Laws.

(b) Each Collection Vehicle shall be registered with the California Department of Motor Vehicles.

(c) Each Collection Vehicle shall be inspected regularly by Franchisee to ensure it meets the requirements of the California Vehicle Code and the California Highway Patrol. Franchisee shall provide copies of its Biannual Inspection of Terminal inspection reports to City within thirty (30) days of its receipt of such reports and shall make all records related to its Collection Vehicles, including Franchisee's maintenance records, available to City upon request by the City Manager.

(d) Each Collection Vehicle shall be equipped with devices capable of covering every open section of the Collection Vehicle in which Solid Waste may be placed and, while operating upon the public rights-of-way, shall be covered so as to prevent any Solid Waste from falling or being blown or otherwise dislodged from the Collection Vehicle.

(e) Each Collection Vehicle shall be continuously maintained so as to both: (1) meet the highest industry standards with regards to efforts to prevent liquid from leaking and to the degree possible ensure each Collection Vehicle is "watertight" and "leak-proof" and, (2) at all times comply with the provisions of all Applicable Laws, including, without limitation, the Vehicle Code and any applicable NPDES permit, with regard to materials leaking from Collection Vehicles. Franchisee shall be responsible to promptly clean any spillage or Solid Waste that leaks or otherwise escapes the Collection Vehicle.

(f) As frequently as determined necessary by the City Manager, each Collection Vehicle shall be painted and shall have routine body work performed so that such vehicles do not become unsightly, as determined by the City Manager.

(g) Franchisee's name, local or toll free telephone number, and a vehicle number shall be visibly printed or painted in letters not less than five (5) inches in height on both sides of each Collection Vehicle. Any other information or signage printed, painted, or displayed on Franchisee's Collection Vehicles, when such vehicles are providing Collection services within City Limits, shall be subject to approval by City. Collection Vehicles are not required to be for exclusive use in the City.

(h) Each Collection Vehicle shall be maintained in a clean and sanitary condition both inside and out and shall be washed at least once every seven (7) calendar days and steam cleaned on a regular basis.

(i) Each Collection Vehicle shall carry a broom, shovel, and operable fire extinguisher, and shall be equipped with a communication device sufficient to allow the driver to communicate directly with Franchisee's dispatcher and/or main office.

(j) Each Collection Vehicle shall be kept in good repair and working order, and shall be equipped with appropriate safety equipment, including any new safety related technologies that become standard in the waste industry, and at a minimum shall have a video monitor-based back-up system, or its equivalent. Franchisee shall keep a sufficient supply of replacement parts and equipment on hand to ensure adequate vehicle maintenance and timely and continuous performance of the Solid Waste Handling Services contemplated by this Agreement.

(k) Franchisee shall inspect each Collection Vehicle daily to ensure that all equipment is operating properly. Collection Vehicles which are not operating properly shall be removed from service until repaired and operating properly. Franchisee shall perform all scheduled maintenance functions upon Collection Vehicles in accordance with the manufacturer's specifications and schedule. Franchisee shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a safe and operable condition. Franchisee shall keep accurate records of all Collection Vehicle maintenance and repair, recorded according to date and mileage, including signed verifications that repairs and maintenance have been properly performed, and shall make such records available to City upon request.

(l) No Collection Vehicle shall be utilized if it is leaking brake, hydraulic, or other fluids, and Franchisee shall clean up any leaks or spills from its Collection Vehicles per the NPDES permits in effect at the time. No fluids shall be washed into storm drains at any time. All NPDES dry-cleaning measures shall be complied with. All Collection Vehicles must be equipped with absorbent for such cleanup efforts.

(m) Franchisee shall annually furnish City a written inventory of all equipment, including Collection Vehicles, used in providing Solid Waste Handling Services pursuant to this Agreement. This inventory shall list all equipment by manufacturer, ID number, date of acquisition, type and capacity.

(n) Franchisee shall utilize Collection Vehicles of a size, weight, nature, and type so as to not be unreasonably intrusive on the community with respect to noise, emissions,

maneuverability, safety, and other factors, and to avoid or minimize pavement damage and wear and tear of the street or adjacent properties, as approved by the City Manager.

(o) Franchisee shall not load Collection Vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local laws or regulations. Noise levels of equipment used for Collection shall not exceed 75db (seventy-five decibels) when measured at a distance of twenty-five (25) feet from the Collection Vehicle, five (5) feet from the ground.

(p) The average fleet age, when applied to all Collection Vehicles used by Franchisee within City Limits, shall be no more than ten (10) years of age at any time during the Term, nor may any Collection Vehicle be purchased for use within City Limits that is over seven (7) years of age at the time of purchase. For purposes of the average fleet age requirement, Collection Vehicles refurbished to specifications approved by the City Manager shall be considered as new when placed back into service.

9.3.3 Specific Requirements for Bins.

(a) Franchisee shall be responsible to maintain and replace, as necessary, all of its Bins.

(b) All of Franchisee's Bins shall be maintained by Franchisee in good repair, and any question as to the meaning of this standard shall be resolved by the City Manager.

(c) Franchisee shall ensure it maintains an accurate list that contains the total number and type of its Bins at each service address, as well as the frequency of Collection for each such Bin. Franchisee shall keep this list up to date at all times, provide it to City upon request, and shall include a current updated list with each Annual Report submitted pursuant to Section 10.1.

(d) All Bins which are used primarily for the disposal of Solid Waste containing liquids shall be maintained by Franchisee in a watertight condition; and shall at all times comply with the provisions of any applicable NPDES permit.

(e) Franchisee shall replace any damaged or unsightly Bins, and shall remove any graffiti that appears on its Bins, within one (1) business day after becoming aware of the damage or unsightly condition.

(f) All Bins shall be kept freshly painted in a uniform fashion.

(g) Franchisee's name and local telephone number shall be placed on all front load bins and roll-off boxes used for Solid Waste Handling Services within the City, in letters not less than three (3) inches high, so as to be visible when the Bin is placed in use. Any smaller wheeled style automated carts shall contain, at a minimum, Franchisee's name and a distinct logo or identification number.

9.4 Performance Standards. Franchisee shall perform Solid Waste Handling Services hereunder in a workmanlike manner consistent with good housekeeping standards

and all relevant provisions of Applicable Laws, including without limitations, the provisions of Division 7.

9.5 Noise and Disruption. Franchisee shall perform Solid Waste Handling Services hereunder in such a manner as to minimize noise and other disruptive impacts including, without limitation, those upon traffic.

9.6 Restriction on Manner of Collection.

9.6.1 No Commingling Without Consent. In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material Collected within the City Limits and processed, Recycled and/or disposed pursuant to this Agreement, no load of Solid Waste Collected by Franchisee from within the City Limits shall be commingled with Solid Waste collected by Franchisee from any person or place outside the City Limits or outside the area governed by this Agreement. Notwithstanding the foregoing, City, in its sole and absolute discretion, may allow Franchisee to commingle Solid Waste or Recyclable Material it Collects within the City Limits with that collected from persons or places outside the City Limits or outside the area governed by this Agreement, if:

(a) Franchisee proposes a means acceptable to City by which to accurately identify and report the Solid Waste and Recyclable Material collected from both within and outside the City Limits and specifically within areas covered by this Agreement as distinctive from areas not covered by this Agreement; and

(b) Franchisee obtains written consent from the City Manager to implement commingling pursuant to any such proposal; and

(c) Franchisee's proposal as approved by the City Manager is successfully implemented such that timely and accurate information regarding the Solid Waste and/or Recyclable Material Collected from within the City Limits, and specifically within areas covered by this Agreement, and the amount of Solid Waste and/or Recyclable Material Collected within the City that is Diverted from Landfills as a result of Recycling or other programs, is provided for all reporting purposes; and

(d) Franchisee's proposal meets all obligations that may exist relating to the use of certain Landfills for deposit of Solid Waste Collected in the City, including any such obligations imposed by the County Agreement.

9.6.2 Withdrawal of Consent for Commingling. The City Manager may, by giving written notice to Franchisee, with or without cause, withdraw any consent given to Franchisee by which commingling is authorized.

9.7 Precautions Regarding the Collection of Hazardous Materials.

9.7.1 Contractual Prohibition Requirement. Franchisee shall include as a condition to its contractual agreement with its Customers a provision prohibiting disposal of Hazardous Waste in any of Franchisee's Collection Vehicles, Bins, or other equipment.

9.7.2 Load Check Program. Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, county, state and federal Hazardous Waste Regulations, shall be maintained for a minimum of five (5) years following the expiration of the Franchise, and shall be made available to the City Manager upon request. Further, prior to destroying or discarding any of such records, Franchisee shall notify City, and upon City's election, Franchisee shall deliver such records to City. Franchisee shall handle and dispose of any such Hazardous Materials in accordance with Applicable Laws.

9.8 Service Routes. Franchisee hereby acknowledges and agrees that the City Manager shall have the authority to set Solid Waste Handling Service routes, including but not limited to entry and exit points to and from Commercial Premises, and to direct Franchisee's Collection Vehicles to follow such routes, when necessary, in the City Manager's sole discretion, to reduce negative impacts on residential areas and City infrastructure.

9.9 Commercial Premises Recycling Services.

9.9.1 Franchisee shall promote, offer and provide a Recycling program for its Customers (the "Commercial Premises Recycling Program") that at a minimum meets the standards required under AB 341, and such program shall be consistent with any Ordinances adopted by the City to implement AB 341. Franchisee shall also assist the City in identifying Customers that are not in compliance with the Recycling requirements set forth in AB 341. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote Recycling services, determine if such Customer is receiving Recycling services from a third party in compliance with the requirements of AB 341, attempt to resolve any logistical detriments to providing Recycling services thereunder, and notify and request assistance from City for potential follow-up action where there is repeated refusal to implement the Commercial Premises Recycling Program. Concurrently with Franchisee's submittal of quarterly and Annual Reports, Franchisee shall submit a report to City that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to its Customers regarding AB 341 requirements, consideration of ordinances which may assist with gaining compliance with AB 341 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Premises Recycling Program. Franchisee shall be responsible for ensuring that its Commercial Premises Recycling Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements.

9.9.2 Franchisee shall provide commingled or Source Separated Recycling Collection services to all of its Customers. Franchisee shall Collect Recyclable Material from each

Customer at frequencies agreed upon with such Customer, but not less than once per week. As of the Effective Date, Customers shall be allowed to deposit, at a minimum, the following materials in Recycling Bins for Collection by Franchisee: paper (all types – anything that "tears"), cardboard, wooden pallets, beverage containers, plastics (including, without limitation, PET, HDPE,#3-7), plastic film, plastic bags, polystyrene packaging material, metals, and other Recyclable materials standard in the Recycling industry, as determined by the City Manager. Franchisee agrees to meet from time to time with City, as needed, and in good faith, to consider modifications to the above minimum list of Recyclable Material, and/or to address developments in processing technologies, emerging uses for various types of materials, changes in available markets, or other relevant issues.

9.9.3 On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Recycling services and programs. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Recycling services and programs to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Recycling services are available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by City, samples of materials provided to said Customers during the subject quarter.

9.10 Commercial Organics Program. Franchisee shall promote, offer and provide an Organics Collection program to all of its Customers (the "Commercial Organics Program"), to be approved by the City Manager, that at a minimum meets the requirements of AB 1826. Franchisee's Commercial Organics Program shall provide for the Collection of Organics separately from other Solid Waste, in Bins, bags, or by other methods approved in advance by the City Manager, and shall thereafter deliver or arrange for the on-going delivery of such Collected Organics to a Diversion facility approved by City. Franchisee shall also assist City in identifying Customers that are not in compliance with the requirements set forth in AB 1826. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote its Commercial Organics Program, determine if such Customer is receiving Organics services from a third party in compliance with the requirements of AB 1826, attempt to resolve any logistical detriments to providing services offered thereunder, and notify and request assistance from the City for potential follow up action where there is a repeated refusal to implement the Commercial Organics Program. Concurrently with Franchisee's submittal of its quarterly and Annual Reports, Franchisee shall submit a report that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to Customers regarding AB 1826 requirements, consideration of ordinances which may assist with gaining compliance with AB 1826 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to

implement the Commercial Organics Program. Franchisee shall be responsible for ensuring that its Commercial Organics Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements. Franchisee shall produce, keep current, and provide information specifically outlining its Commercial Organics Program, which shall specifically include the annual publication and distribution of a brochure describing this service to all applicable Customers in City. On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Commercial Organics program. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Commercial Organics program to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Commercial Organics program is available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by the City Manager, samples of materials provided to said Customers during the subject quarter.

9.11 Other Collection Programs As May Be Required by Law. In the event CalRecycle, or any federal or state law or regulation, imposes upon City or Franchisee a requirement for the implementation of any Source Separated program for the Collection of any type of discarded material (whether or not meeting the definition of Solid Waste hereunder) not already covered by this Agreement but applicable to Franchisee's Customers, Franchisee shall design and present a program to City to comply with such requirement, which program shall meet the City Manager's reasonable approval ("Proposed Program").

Franchisee shall present the Proposed Program within ninety (90) days of a request to do so by City. The Proposed Program shall include a detailed description of the following: (1) method of Collection; (2) equipment to be used; (3) materials to be Collected; and (4) proposed promotional and public education materials.

9.12 Guaranteed Minimum Franchisee Recycling Rate. Franchisee shall conduct its operations hereunder such that a minimum of fifty percent (50%) of all Solid Waste Collected from Franchisee's Customers (taking into account Diversion achieved by efforts other than its services) is Diverted from disposal at Landfills for each calendar year beginning January 1, 2018 ("Recycling Diversion Requirement"). For the purposes of this Section, Diversion includes only Recycling methods, Transformation (and/or other forms of converting Solid Waste into energy), and other processes which are accepted by the State toward meeting City's Diversion goal under AB 939. Franchisee shall not be entitled to a reduction in the Recycling Diversion Requirement, or a rate adjustment, if or when:

- Transformation or other facilities are no longer available for any reason;
- CalRecycle Diversion credit under AB 939 or other Applicable Laws is no longer provided for Solid Waste sent to a Transformation facility; or
- CalRecycle Diversion credit under AB 939, AB 1594, or other Applicable Laws

expires for Green Waste used as alternative daily Landfill cover.

At such time as City discovers that CalRecyle Diversion credit under AB 939 or other Applicable Law will no longer be provided for Solid Waste sent to a Transformation facility, City shall issue formal notice to Franchisee that any Solid Waste delivered to a Transformation facility from the date specified in City's notice through the end of that calendar year shall be subject to the 10% Franchise Fee, and shall not be eligible for Diversion credit. Notwithstanding anything in this Agreement to the contrary, Franchisee's Diversion requirements under this Agreement shall be subject to all Applicable Laws, such that if Diversion requirements in the State of California increase, Franchisee shall be required to comply with such increased Diversion requirement.

To comply with this Section, Franchisee is required to submit timely tonnage reports supporting the Recycling Diversion Requirement, and to provide supporting documentation as may be requested by City or its designee as part of, or independent of, an audit. Failure to meet, and fully support, the Recycling Diversion Requirement may result in termination of this Agreement pursuant to Section 15.

9.12.1 Implementation of Additional Diversion Services. In the event City does not meet the current Diversion goal of fifty percent (50%) imposed by AB 939, and City finds that Franchisee is not achieving the minimum fifty percent (50%) Diversion requirement pursuant to this Section 9.12, City may direct Franchisee to perform additional services (including the implementation of new Diversion programs) or modify the manner in which it performs existing services, and Franchisee agrees to do so.

9.13 Compliance and Penalties. City may provide Franchisee with written notice of violations of this Section. If Franchisee fails to cure any noticed violation within a reasonable period of time determined in City's sole discretion, the end date of which is stated in the written notice, the City may charge Franchisee up to Two Hundred Fifty Dollars ($250) per day for each violation identified in the written notice. Upon request, City may in its sole discretion, but is not required to, extend Franchisee's period to cure. The penalties in this Section are in addition to any penalties assessed pursuant to other provisions in this Agreement.

SECTION 10
REPORTING REQUIREMENTS

The Parties acknowledge that City will require reporting at various intervals by which information important to City can be compiled and analyzed. Throughout the Term the Parties agree to work together to address City's needs with respect to the information to be contained in reports prepared by Franchisee. The following is intended as a starting point in order to have established an objective baseline for reporting, but the frequency and content of the reports called out below may be changed by agreement of the Parties; provided any such change is approved by the City Manager in writing.

10.1 Annual Report. On or before the 45th day following January 1st of each year during the Term of this Agreement, Franchisee shall submit a written annual report and operations plan through completion and submittal of a form developed and approved by the

City Manager (each such report, an "Annual Report"). The Annual Report shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the information provided. The Annual Report shall include, but may not be limited to, information on the amount of Solid Waste Collected, disposed of, and Diverted, the methods utilized to Collect such Solid Waste, and identifying the disposal and non-disposal facilities to which the Franchisee delivered such Solid Waste. At a minimum, the Annual Report shall include all of the following:

10.1.1 Total Tonnage Collected and Diverted. A summary of the total tons of Solid Waste Collected in City in the preceding year as well as a summary of the total tonnage Diverted from the State's landfill systems during that time frame.

10.1.2 State-Mandated Compliance Reports. Information and State-Mandated Compliance Reports, in a form and content approved by the City Manager.

10.1.3 Yearly Comparison. In the second year and each subsequent year during the Term of the Agreement, Franchisee shall provide a year-by-year comparison, by weight, of Solid Waste disposal and Diversion.

10.1.4 Gross Receipts and Franchise Fee. Franchisee shall provide a total revenue statement, certified by the chief financial officer of Franchisee, setting forth the quarterly Franchise Fees paid and the basis for the calculation thereof, including specifically a breakdown of sources of revenue included in Gross Receipts and the amount of revenue derived from each such source comprising Gross Receipts.

10.1.5 Landfill and Processing Facilities. Franchisee shall provide the name and location of all Landfills, Processing Facilities, end users, and other disposal facilities used to dispose of material Collected from the City.

10.1.6 Customer/Bin Counts. Franchisee shall provide the number of Customers that received routine commercial service, the number of Customers that received Temporary Bin Service, and the Bin data required to be compiled and submitted by Franchisee pursuant to Section 9.3.3. In addition, Franchisee shall provide the number of Customers serviced in the City by processing type, including: Landfill Customers, MRF Customers, and Green Waste Composting Facility Customers. Also, Franchisee shall include the number of Source-Separated Recycling Customers.

10.1.7 Diversion Efforts. Franchisee shall describe Diversion efforts provided to Customers. Include staffing time, educational information provided, and other activities provided to help promote Recycling within commercial and industrial businesses.

10.1.8 Franchisee Recycling Plan. Franchisee shall provide an annual update to the Recycling Plan required by Section 10.3. In addition, Franchisee shall summarize each previous year's Recycling Plan.

10.1.9 Vehicle List. Franchisee shall provide an updated list of vehicles to be used to provide Solid Waste Handling Services in the City.

10.1.10 Processing Facility Listing. Franchisee shall provide an updated list of Processing Facilities to be used by Franchisee.

10.2 Quarterly Summary Reports. No later than forty five (45) days following each calendar quarter during the Term of this Agreement, Franchisee shall submit quarterly reports including the same information required by Section 10.1 under the headings: Tonnage, Diversion, and State-Mandated Compliance Reports; Gross Receipts and Franchise Fee; Landfill and Processing Facilities; Customer Counts; and Diversion Efforts.

The quarterly reports shall be submitted to the City Manager. Each quarterly report shall be accompanied by a statement, included at the bottom of such report, by the chief financial officer of Franchisee certifying to the accuracy of the report.

The Franchise shall maintain in its files for the Term of this Agreement, and at least three (3) years thereafter, tonnage receipts provided to Franchisee by each Landfill or Processing Facility used by Franchisee to dispose of waste Collected in the City. Franchisee shall provide such receipts for the audit financial analysis or upon request of City. This data will be used by City to verify Franchisee's quarterly reports. City may require, in its discretion, and Franchisee shall provide, additional information in connection with the quarterly reports, such as the number and types of businesses serviced, or other information City deems useful or appropriate.

10.3 Franchisee Recycling Plan.

10.3.1 Recycling Plan. Franchisee shall develop and submit a Recycling Plan which must be approved in writing by the City Manager before Franchisee commences Solid Waste Handling Services under this Agreement. Approval of the Recycling Plan shall be in the City Manager's sole discretion. Approval shall be based on the City Manager's review of the following Recycling Plan requirements. The City Manager may authorize, in writing, Franchisee to commence Solid Waste Handling Services while the Franchisee's Recycling Plan is under review. Should the City Manager subsequently reject Franchisee's Recycling Plan, Franchisee must immediately cease operations unless otherwise authorized, in writing, by the City Manager to continue services while Franchisee develops a new Recycling Plan. The Recycling Plan shall include the following:

(a) Statement of Overall Recycling Goals and Focus.

(b) Statement of Targeted Means to Increase Diversion Opportunities.

(c) Processing Facilities and Diversion information including:

- Processing Facilities to be used and their respective types.
- Estimated Solid Waste weight to be Collected by Franchisee within the City Limits in the current calendar year.
- Estimated Solid Waste Collected within the City Limits to be delivered by Franchisee and accepted by each Processing Facility in the current calendar year.

- How, if at all, Solid Waste will be processed between Collection and delivery to a Processing Facility.

- The Diversion rate of each Processing Facility.

(d) Marketing and Education Strategy information including:

- Franchisee staff and dedicated hours per week focused on Diversion.

- Information Franchisee intends to provide its Customers to encourage Diversion (e.g. brochures, guides, price incentives).

(e) Target Goals information including:

- Franchisee's Diversion Target Goals, in tonnage, by material type and Processing Facility.

- Franchisee's Customer Target Goals to increase the number of Customers that have Recycling, reuse, composting, or other Recycling services, including efforts to increase Source Reduction.

10.3.2 Annual Update. Franchisee shall submit on an annual basis an updated Recycling Plan as described in this Section 10.3. In addition, the annual Franchise Recycling Plan shall summarize each previous year.

10.4 Adverse Information. Franchisee shall provide City copies of all reports, pleadings, applications, notifications, communications, and documents, as well as copies of all decisions, correspondence, and actions, and other material adversely affecting this Agreement, or related in any manner to Franchisee's performance of this Agreement, submitted or received by Franchisee to or from the United States Environmental Protection Agency, CalRecycle, the California Regional Water Quality Control Board, and any other federal, state, regional, or local regulatory agency. Copies shall be submitted to City simultaneously with Franchisee's filing of such matters with said agencies. Franchisee's routine correspondence to said agencies need not be automatically submitted to City, but shall be made available to City upon written request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.5 Other Reporting Requirements. All reports and records required under this or any other Section of this Agreement shall be furnished at the sole expense of Franchisee. Franchisee agrees to submit such reports and information on computer discs or electronically in a format compatible with City's computer system as it may be upgraded from time to time, if requested by City. A copy of each of Franchisee's annual and other periodic public financial reports and those of each of its parent, subsidiary, and affiliated corporations and other entities, as City requests, shall be submitted to City within thirty (30) days after City giving

notice to Franchisee of such a request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.6 Failure to Report. The refusal, failure, or neglect of Franchisee to file any of the reports required by this Agreement within thirty (30) days such report is due, or the inclusion of any materially false or misleading statement or representation made knowingly by Franchisee in such report, shall be deemed a material breach of this Agreement, and shall subject Franchisee to all remedies, legal or equitable, which are available to City under this Agreement or otherwise. In the event City elects to suspend Franchisee's franchise rights for Franchisee's failure to file a report, as a condition to Franchisee's reinstatement, Franchisee shall be required to pay to City a penalty in the amount of Five Hundred Dollars ($500) for each thirty (30) day period in which the applicable report is delinquent.

10.7 Confidentiality. To the extent permitted by law, City shall endeavor to keep confidential any confidential information, such as Customer information or information regarding Franchisee's financial matters, that is submitted in connection with any reports required hereunder.

SECTION 11
AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION

11.1 Warranties and Representations.

(a) Franchisee warrants and represents that it is familiar with City's SRRE, it is familiar with City's waste stream, and it has the ability to and will provide sufficient programs and services to ensure City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, and all amendments thereto, with respect to the Customers it services hereunder.

(b) Without regard to any related indemnification requirements, Franchisee guarantees to City that it shall carry out its obligations under this Agreement so that (1) both it and City will at all times be in compliance with the requirements of all Applicable Laws, including specifically AB 939, AB 341, and AB 1826, and (2) City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, AB 341, and AB 1826, as well as the regulations implementing each of them and any and all amendments to each of them, with respect to the Customers Franchisee services hereunder. In meeting this obligation, Franchisee shall be mindful of and comply with all requirements of the County Agreement, including specifically, without limitation, the requirements thereof generally relating to (i) the delivery of Solid Waste only to transfer stations that provide quarterly certifications of Solid Waste delivered, and (ii) the disposal of residual Solid Waste that remains after Recycling processes have been completed. Commencing immediately upon the Effective Date, Franchisee shall implement all programs necessary to ensure City complies with all state-mandated programs relevant to the services provided hereunder and shall perform public education, awareness, and outreach activities as required by any state-mandated program or as reasonably required by the City Manager. Franchisee shall submit to the City Manager for review and approval all proposed written public

educational, awareness and outreach materials. Franchisee shall engage in any required education, awareness, and outreach activities within thirty (30) days of commencing services to any new Customers, and on not less than an annual basis with all existing Customers. Franchisee shall provide City with quarterly and annual written reports in a form acceptable to the City Manager and adequate to meet City's filing and reporting requirements with CalRecycle and the County of Orange, including any associated with AB 939, AB 341, and AB 1826 throughout the Term of this Agreement. At City's request, Franchisee shall be responsible to prepare, or assist City with the preparation of, all reports and other information as may be required by any agency, including specifically, the State of California, in order to comply with any Applicable Laws related to the services contemplated by this Agreement.

11.2 Mutual Cooperation. City and Franchisee shall reasonably cooperate in good faith with all efforts by each other to meet City's Diversion and other compliance requirements imposed by AB 939, AB 341, AB 1826, and other Applicable Laws. In this regard, City's obligations shall include, without limitation, making such petitions, requests and applications as may be reasonably requested by Franchisee for time extensions in meeting Diversion goals, reductions in Diversion goals, or other exceptions from the terms of AB 939, AB 341, AB 1826, and other Applicable Laws.

11.3 Performance Requirements. Franchisee's obligations pursuant to the provisions of this Section shall include, but not be limited to, the following terms:

11.3.1 Indemnification Requirements. Franchisee agrees to defend, with counsel approved by City, indemnify, and hold harmless the City Indemnitees from and against all fines and/or penalties and other liabilities which may be imposed by CalRecycle or any other regulatory agency if (1) Franchisee fails or refuses to timely provide information relating to its operations which is required pursuant to this Agreement or any Applicable Laws and such failure or refusal prevents or delays City from submitting reports required by Applicable Laws in a timely manner; or (2) the Source Reduction and Recycling goals, Diversion goals, program implementation requirements, or any other requirements of Applicable Laws are not met with respect to the Customers Franchisee services hereunder.

11.3.2 Assistance to City; Payment of Fees, Fines, and Penalties. In addition, Franchisee agrees, at its sole cost and expense, to:

(a) Assist City in responding to inquiries from CalRecycle;

(b) Assist City in preparing for, and participating in, CalRecycle's biennial review of City's compliance with Applicable Laws;

(c) Assist City in applying for an extension, if so directed by City;

(d) Assist City in any hearing conducted by CalRecycle relating to City's compliance with Applicable Laws;

(e) Assist City in the development and implementation of a public awareness and education program that is consistent with Applicable Laws, as well as any related requirements of Applicable Laws;

(f) Provide City with advice on Recycling, Source Reduction, and other technical assistance related to compliance with the Applicable Laws;

(g) Defend, with counsel acceptable to City, the City Indemnitees against the imposition of fines and/or penalties, or any other liabilities, issued by CalRecycle as a result of Franchisee's failure to comply with Applicable Laws, including, without limitation, AB 939, AB 341, and AB 1826; and

(h) Be responsible for and pay, any fees, penalties or other costs imposed against City by CalRecyle and Indemnify and hold harmless City against any fines, penalties, or other liabilities, levied against it for violation of any state-mandated Diversion requirements, or violation of any other provision of Applicable Laws; provided, however, Franchisee's obligation to indemnify City for any penalties or fines set forth in this sub-paragraph shall be in proportion to the amount of such fines or penalties imposed because of Franchisee's delay or failure to perform its obligations hereunder.

11.4 Annual Compliance Review. City intends to review Franchisee's performance annually at its expense to ensure compliance with the terms and provisions of this Agreement ("Annual Compliance Review"). At a minimum, City intends to have internal staff or outside consultants review Franchisee's performance to ensure ongoing compliance with the terms hereof, including, but not limited to, the payment of required fees, performance of the Solid Waste Handling Services stated herein, implementation of programs required under the Agreement, Franchisee's maintenance and upkeep of records, and Franchisee's compliance with all Applicable Laws. Franchisee shall provide any and all information reasonably requested by City in connection with its efforts to ensure compliance with the terms hereof, regardless of whether such information is specifically otherwise called out herein as an item that Franchisee is required to maintain and provide to City.

SECTION 12
FRANCHISEE'S BOOKS AND RECORDS; AUDITS

12.1 Examination of Records. Franchisee shall maintain all records relating to the Solid Waste Handling Services provided hereunder, including but not limited to Customer lists, billing records, accounts payable records, maps, service requests, cash receipts records, AB 939 compliance records, and other documents and materials which reasonably relate to Franchisee's compliance with and performance of the provisions of this Agreement (the "Records"), for the full Term of this Agreement, and an additional period thereafter of not less than three (3) years, or any longer period required by law. City shall have the right, upon five (5) business days advance notice, to inspect the Records. Such Records shall be made available to City at Franchisee's regular place of business, but in no event outside the County of Orange.

12.2 CERCLA Defense Records. City views the ability to defend against CERCLA and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for disposal, as well as where it was not taken, to be matters of concern. Franchisee shall maintain data retention and preservation systems which can establish where Solid Waste Collected in the City was

landfilled (and therefore establish where it was not landfilled) for not less than five (5) years following the termination of this Agreement, and agrees to notify City's Risk Manager, City Clerk and City Attorney before destroying such records thereafter. At any time, including after the expiration of the Term hereof, Franchisee shall provide copies of such records to City. The requirements of this Section shall survive the expiration of the Term of this Agreement.

12.3 Audits by City. City shall have the right to conduct or to contract with an independent auditing firm to perform an audit, at City's expense, of Franchisee's records (the "City Audit") to ensure compliance with the provisions of this Agreement on an annual and/or as-needed basis, to be determined by the City. The City Audit shall include, without limitation, a review of Franchisee's cash receipts records, Solid Waste tonnage Collection, Diversion, and other related records, as well as those of each of its parent, subsidiary and/or affiliated companies, as appropriate, to determine Franchisee's Gross Receipts, the accuracy of Franchise Fees paid, and such other information as is reasonably deemed appropriate by the City Manager to evaluate Franchisee's performance hereunder. As part of the City Audit Franchisee's Customer's accounts and related records may be subject to review. While Franchisee will not be required to submit detailed account records, such as the names and addresses of Customers, to the City in connection with required reports hereunder, Franchisee shall make such records and information available for review in connection with the City Audit at Franchisee's business offices.

Should any City Audit reveal an underpayment of any Franchise Fee required pursuant to this Agreement, the amount of such underpayment shall become due and payable to City not later than fifteen (15) days after written notice of such underpayment is sent to Franchisee by City, complete with any additional late charges as set forth herein. If a City Audit reveals inaccuracies or inconsistencies in more than five percent (5%) of all Customer accounts, either with Franchisee's operations or billing systems, or an underpayment of Franchise Fees of more than three percent (3%), Franchisee shall bear the entire cost of such City Audit and shall pay a sum necessary to cover such costs to the City within thirty (30) days of demand.

12.4 Inspection. City shall have the right to inspect Franchisee's books and records related to the Franchisee's performance under this Agreement. The inspections shall be allowed at any time during normal business hours, but City shall provide at least two (2) days advance written notice before City commences an inspection of Franchisee's books and records. Among other things, City shall be allowed to review Franchisee's contracts with its Customers, and shall be allowed to communicate directly with Franchisee's Customers, for the purpose of determining whether Franchisee is in compliance with this Agreement. City shall not reveal any trade secrets or proprietary information obtained during their review of Franchisee's books and records.

SECTION 13
RULES AND REGULATIONS OF CITY MANAGER

The City Manager shall have the power to establish rules and regulations respecting the accumulation, Collection and transportation of Solid Waste not inconsistent with the provisions of this Agreement, providing such rules and regulations are found to be reasonably necessary by the

City Manager for enforcement of the provisions of this Agreement, or any and all applicable laws and ordinances, and for the preservation of the public peace, health and safety. Franchisee agrees to comply with any and all such rules and regulations.

SECTION 14
INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE

14.1 Indemnification of City.

14.1.1 General Indemnification.

(a) Franchisee hereby agrees to and shall indemnify and hold harmless the City Indemnitees from and against any and all loss, liability, penalty, forfeiture, claim, demand, action, proceeding or suit in law or equity of any and every kind and description (including, but not limited to, injury to and death of any person and damage to property, or for contribution or indemnity claimed by third parties) arising out of, resulting from, and/or in any way connected with this Agreement including: (1) the negligence or willful misconduct of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement; (2) the failure of Franchisee, its officers, employees, agents, and/or subcontractors to comply in all respects with the provisions of this Agreement (including without limitation Franchisee's obligation to ensure City complies with the requirements of the County Agreement), all Applicable Laws (including, without limitation, the Environmental Laws), ordinances and regulations, and/or applicable permits and licenses; (3) the acts of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement for which strict liability is imposed by law (including, without limitation, the Environmental Laws); and (4) any challenge to the award of, or any provisions of this Agreement (including any claim that the application of any provision hereof violates any provision of the California Constitution). The foregoing indemnity and hold harmless provisions shall apply regardless of whether such loss, liability, penalty, forfeiture, claim, demand, action, proceeding, suit, injury, death or damage is also caused in part by any of City Indemnitees' negligence, but shall not extend to matters resulting from the City Indemnitees' sole negligence, or willful misconduct. Franchisee further agrees to and shall, upon demand of City, at Franchisee's sole cost and expense, defend (with attorneys acceptable to City) the City Indemnitees against any claims, actions, suits in law or equity or other proceedings, whether judicial, quasi-judicial or administrative in nature, arising or resulting from any of the aforementioned events, and to reimburse City for any and all costs and expenses City incurs in providing any such defense, either before, during or after the time Franchisee elects to provide such defense, including any and all costs incurred in overseeing any defense to be provided herein by Franchisee. Franchisee shall receive credit towards this indemnity obligation for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City

(b) Franchisee, upon demand of City, made by and through the City Attorney, shall protect City and appear in and defend the City Indemnitees in any claims or actions by third parties, whether judicial, administrative or otherwise, including, but not limited to disputes and litigation over the definitions of "Solid Waste" or "Recyclable Material," the scope of the rights granted herein, conflicts between the rights granted herein and rights asserted by other Persons, or the limits of City's authority with respect to the grant of licenses, or agreements,

exclusive or otherwise, asserting rights under the Dormant Commerce Clause or any other federal or state laws to provide Collection services in the City.

(c) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the expiration or earlier termination of this Agreement.

14.1.2 Hazardous Substances Indemnification.

(a) Without regard to any insurance coverage or requirements (but giving credit to Franchisee for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City), and without limiting the above general indemnification obligation in any way, Franchisee specifically agrees to and shall, to the maximum extent permitted by law, defend (with counsel acceptable to City) reimburse, indemnify, and hold the City Indemnitees harmless from and against any and all claims, actions, liabilities, damages, demands, judgments, losses, costs, liens, expenses, suits, actions, attorneys' fees, consultant fees, penalties and any and all other losses, damages, fees and expenses of whatever kind or nature ("Claims") (including but not limited to response costs, investigative costs, assessment costs, monitoring costs, treatment costs, cleanup costs, removal costs, remediation costs, and similar costs, damages and expenses) that arise out of or are alleged to arise out of or in any way relate to any action, inaction or omission of Franchisee that:

(i) results in any demand, claim, notice, order, or lawsuit, asserting that any of the Indemnitees is liable, responsible or in any way obligated to investigate, assess, monitor, study, test, treat, remove, remediate, or otherwise cleanup, any Hazardous Contaminant (as defined herein); or

(ii) relates to material Collected, transported, Recycled, treated or disposed of by Franchisee.

(b) Franchisee's obligations pursuant to this Section shall apply, without limitation, to:

(i) any Claims brought pursuant to or based on the provisions of CERCLA, RCRA, the California Hazardous Substances Account Act (California Health & Safety Code Sections 25300 et seq.), the California Hazardous Waste Control Laws (California Health and Safety Code Sections 25100 et seq.), the California Porter-Cologne Act (California Water Code Section 13000 et seq.), and any and all amendments and regulations thereto, and any other Federal, State, regional or local environmental statutory or regulatory provision;

(ii) any Claims based on or arising out of or alleged to be arising out of the ownership, use, lease, sale, design, construction, maintenance or operation by Franchisee of any facility;

(iii) any Claims based on or arising out of or alleged to be arising out of the marketing, sale, distribution, storage, transportation, disposal, processing or use of any materials recovered by Franchisee;

(iv) any Claims based on or arising out of or alleged to be arising out of any breach of any express or implied warranty, representation or covenant arising out of or in connection with this Agreement.

14.1.3 Additional Indemnification Requirements.

(a) The indemnity and defense obligations in this Section 14 shall apply irrespective of the negligence or willful misconduct of Franchisee or any affiliate of Franchisee.

(b) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the termination or expiration of this Agreement.

(c) With regard to any claim covered by this provision arising from the delivery of Solid Waste to the Orange County landfill system pursuant to the terms of the County Agreement, the indemnity provisions hereof are intended to be supplemental to any indemnification obligations owed to the City by the County of Orange pursuant to the County Agreement.

14.2 Surety. Contemporaneously with execution of this Agreement, as security for Franchisee's faithful performance of all obligations of this Agreement, Franchisee shall provide a surety mechanism (the "Surety") as more fully defined below in the amount of Ten Thousand Dollars ($10,000). The Surety may be comprised of either a performance bond or an irrevocable letter of credit, or a combination of both. If a letter of credit is utilized to satisfy some or all of the Surety requirements, it shall be drawn upon a financial institution with an office within fifty (50) miles of City, and otherwise in a form acceptable to the City Attorney. The performance bond, if any, shall be issued by a duly authorized corporate surety company authorized to do business in California, and in a form acceptable to the City Attorney. The cost of the Surety shall be the sole responsibility of Franchisee. The Surety shall be released within ninety (90) days after both (i) the expiration of the Term of this Agreement, and (ii) Franchisee's satisfactory performance of all obligations hereunder.

14.3 Forfeiture of Surety. In the event Franchisee shall for any reason become unable, or fail in any way, to perform as required by this Agreement, City may declare a portion or all of the Surety, as may be necessary to recompense and make whole the City, forfeited to the City. Upon partial or full forfeiture of the Surety, Franchisee shall restore the Surety to its original amount within thirty (30) days of the City's notice to do so. Failure to restore the Surety to its full amount within thirty (30) days shall be a material breach of this Agreement.

14.4 Use of Surety by City. Notwithstanding any provision hereof to the contrary, thirty (30) days following City providing Franchisee with written notice of its failure to pay City any amount owing under this Agreement, either the letter of credit or performance bond comprising the Surety may be utilized by City for purposes including, but not limited to: (1) payment of sums due under the terms of this Agreement which Franchisee has failed to timely pay to City, including specifically liquidated damages; and (2) reimbursement of costs borne by City to correct violations of this Agreement not corrected by Franchisee.

14.5 Replacement Letter of Credit. City may draw upon the entire letter of credit (if any) utilized to meet Franchisee's obligations pertaining to the Surety, and convert it to a cash deposit, if Franchisee fails to cause the letter of credit to be extended or replaced with another satisfactory letter of credit no later than sixty (60) days prior to its expiration.

14.6 Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement the following types of insurance and shall maintain the following minimum levels of coverage, which shall apply to any claims which may arise from or in connection with Franchisee's performance hereunder or the actions or inactions of any of Franchisee's officers, agents, representatives, employees, or subcontractors in connection with Franchisee's performance. The insurance requirements hereunder in no way limit Franchisee's various defense and indemnification obligations or any other obligations as set forth herein.

14.6.1 Comprehensive General Liability. Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01 including completed operations and contractual liability, with limits of liability of not less than Two Million Dollars ($2,000,000) per occurrence and Four Million Dollars ($4,000,000) annual aggregate for liability arising out of Franchisee's performance of this Agreement. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set forth above. If written with an aggregate, the aggregate shall be double the occurrence limit. Such insurance shall be endorsed to:

(a) Name the City of Irvine and its employees, representatives, officers, officials, agents, representatives, and volunteers (collectively hereinafter "City and City Personnel") as additional insured for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.2 Automobile Liability Insurance. Insurance with a limit of liability of not less than Two Million Dollars ($2,000,000) each occurrence and Two Million Dollars ($2,000,000) annual aggregate. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set above. Such insurance shall include coverage for all "owned," "hired" and "non-owned" vehicles, or coverage for "any auto." Such insurance shall be endorsed to:

(a) Name the City and City Personnel as additional insureds for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.3 Workers' Compensation Insurance.

(a) In accordance with the Labor Code of California and covering all employees of Franchisee providing any service in the performance of this agreement. Such insurance shall be endorsed to waive the insurer's right of subrogation against the City and City Personnel with respect to the performance of Franchisee's obligations under this Agreement.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement unless your insurance carrier is the State of California Insurance Fund (SCIF) and the endorsement numbers 2570 and 2065 are referenced on the certificate of insurance.

Franchisee's completion of the form attached hereto as Exhibit B shall be a condition precedent to Franchisee's rights under this Agreement. Should Franchisee certify, pursuant to Exhibit B, that, in the performance of the work under this Agreement, it shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, Franchisee shall nonetheless maintain responsibility for requiring that any subcontractors performing work under this Agreement have and maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the work performed under this Agreement.

14.6.4 Environmental Pollution Control Insurance. Franchisee shall maintain either an endorsement to its general liability policy, or a separate policy of insurance covering environmental pollution and contamination that names the City and City Personnel as an additional insured. Said coverage shall be in the amount of not less than One Million Dollars ($1,000,000) per occurrence, and Two Million Dollars ($2,000,000) in the aggregate, and shall substantially comply with all other provisions set forth in Section 14.6.1.

14.6.5 Endorsements. A statement on an insurance certificate will not be accepted in lieu of the actual endorsement. Insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to City for approval.

Additional Insured Endorsements shall not:

(1) Be limited to "Ongoing Operations"

(2) Exclude "Contractual Liability"

(3) Restrict coverage to the "Sole" liability of Franchisee

(4) Contain any other exclusion contrary to the Agreement.

Any Deductible and/or Self-Insured Retentions must be disclosed to City.

14.6.6 Acceptability of Insurers. Each policy shall be from a company with current A.M. Best's rating of A VII or higher and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus lines brokers under applicable

provisions of the California Insurance Code or any federal law. Any other rating must be approved in writing by the City.

14.6.7 Insurance of Subcontractors. Franchisee shall be responsible for causing subcontractors to maintain the same types and limits of coverage in compliance with this Agreement, including naming the City and City Personnel as additional insureds to the subcontractor's policies.

14.6.8 Verification of Coverage. Franchisee shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this Article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by or acceptable to City and are to be received and approved by City before work commences.

14.6.9 Loss or Reduction in Insurance. In the event that Franchisee fails to retain or maintain insurance with the scope and amounts of coverage required hereunder, City shall have the right, but not the obligation, to either terminate this Agreement, or obtain insurance coverage as required herein on behalf of Franchisee and utilize funds from the Surety defined in this Section 14 to pay the cost of providing such coverage.

SECTION 15
CITY'S REMEDIES; DEFAULT AND TERMINATION

15.1 City's Right to Suspend or Terminate. The City shall have the right to suspend or terminate this Agreement, and the nonexclusive franchise granted herein, upon Franchisee's breach of any of its obligations hereunder.

15.2 Notice of Default. If the City Manager determines that Franchisee has defaulted in the performance of any obligation hereunder, or that Franchisee's performance pursuant to this Agreement with respect to such matters has not been in conformity with reasonable industry standards which are obtained in similar cities in Southern California, the provisions of this Agreement, the requirements of the Municipal Code, the requirements of CalRecycle, including, but not limited to, requirements for Source Reduction and Recycling or any other applicable federal, state, or local law or regulation, including but not limited to the laws governing transfer, storage, or disposal of Special Wastes, or Hazardous Substances (to the extent applicable to Franchisee, and/or Franchisee's activities under this Agreement), the City Manager may provide written notice to Franchisee of such default. The City Manager may, in such written notice, set a reasonable time within which correction of such default shall be made. Unless a longer or shorter time is otherwise specified by the City Manager, a reasonable time for correction shall be thirty (30) days from the date such written notice is given.

15.3 Termination Without Right to Cure. City shall have the right of suspension or termination as a result of Franchisee's failure to timely cure any deficiency as set forth above, which right is in addition to City's right to terminate this Agreement without affording Franchisee an opportunity to cure in circumstances where Franchisee is determined to have

materially breached this Agreement. Notwithstanding anything to the contrary in Section 15.2 above, City shall thus be afforded the right to terminate this Agreement without affording the right to cure in the event of any material breach hereof by Franchisee, including without limitation any action, inaction or circumstance defined herein as a material breach, and/or under any of the following circumstances which are hereby defined as material breaches:

(a) If Franchisee practices, or attempts to practice, any fraud upon City.

(b) If Franchisee becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Franchisee in a bankruptcy proceeding.

(c) If Franchisee willfully violates any orders or rulings of any regulatory body other than City having jurisdiction over Franchisee relative to this Agreement. So long as City's rights are not prejudiced during the pendency of any challenge to such orders or rulings by Franchisee, Franchisee may contest any such orders or rulings by appropriate proceedings conducted in good faith, in which case no material breach of this Agreement shall be deemed to have occurred until a final ruling has been rendered.

(d) If Franchisee fails to meet the Diversion requirements of this Agreement or pursuant to Applicable Laws.

(e) If Franchisee fails to materially comply with any insurance or indemnification requirement set forth in this Agreement; provided, however, that Franchisee shall have a reasonable opportunity to cure any default relating to the Franchisee's failure to provide the City with proof of insurance, so long as such insurance is in effect at all times.

(f) If City is required to pay any fine or penalty, which Franchisee is required by the terms hereof to pay, yet which Franchisee fails, refuses, neglects or is unable to timely pay.

(g) If Franchisee, or any management level employee of Franchisee is convicted of a "Criminal Matter" (as defined herein). For purposes of this Section the term "Criminal Matter" refers to any felony or misdemeanor offense having any relationship to either Solid Waste Handling Services or public corruption (including, without limitation, bribery, conflict of interest related allegations, vote selling, or any similar type charges).

15.4 Termination Procedure. The following procedure shall apply to either of the following:

(a) any action or inaction by Franchisee which is a material breach of this Agreement, not requiring that Franchisee be afforded the right to cure, or

(b) any circumstance in which Franchisee fails to correct, to the satisfaction of the City Manager, all deficiencies contained in a written notice of default within the specified time (or if it is not reasonably possible to correct such deficiencies within the specified time, and Franchisee fails to commence to correct or remedy such deficiencies within the specified time and diligently effect such correction or remedy thereafter).

In the event of either of the above, then the City Manager shall either refer the matter to the City Council for review, or review the matter himself or herself and upon completion of such review notify Franchisee of the City Manager's decision, in writing.

15.4.2 City Manager Review. If the City Manager reviews the matter and determines that Franchisee has failed to properly or adequately perform as set forth above, the City Manager, in the exercise of his or her sole discretion, may terminate this Agreement, or take such other action as he or she deems appropriate to pursue any remedy available to City. A decision or order of the City Manager shall be final and binding on Franchisee unless Franchisee files a "Notice of Appeal" with the City Clerk within five (5) days of the date the notice of the City Manager's decision is given. The City Manager shall schedule any appeal for consideration by the City Council at the earliest feasible Council Meeting following the date a Notice of Appeal is given to City.

15.4.3 City Council Review. In the event an appeal of a decision of the City Manager is filed, or if the City Manager refers the matter directly to the City Council upon Franchisee's failure to cure a default, the City Council shall set the matter for consideration as a regular agenda item, and the matter shall not require a public hearing. In reviewing the matter the City Council may consider any information reported by the City Manager regarding the deficiencies, and shall give Franchisee, or its representatives and any other interested person, a reasonable opportunity to be heard. The Council shall determine, in the exercise of its absolute and sole discretion, whether Franchisee has failed to properly or adequately perform as set forth above, and if so whether to terminate the Agreement, or take such other action as it deems appropriate to pursue any remedy available to City. The decision of the City Council shall be final.

15.4.4 Performance During Reviews. Franchisee's performance under this Agreement is not excused, nor shall its rights to operate hereunder be impacted, during any period of time when its performance is under review as set forth above, including at any time prior to a final decision as to whether such performance is deficient.

15.5 Franchisee's Obligations Upon Termination. In the event this Agreement is terminated pursuant to this Section 15 or the Term of this Agreement expires:

(a) Franchisee shall have no right or authority to engage in Solid Waste Handling Services within the City Limits under this Agreement.

(b) Franchisee shall remain liable to City for any and all fees that would otherwise be payable by Franchisee, including specifically amounts resulting from the late payment of Franchise Fees.

(c) Franchisee shall allow its Customers to arrange for Solid Waste Handling Services with a Solid Waste enterprise collector authorized to perform such services, without penalty or liability for breach of contract.

(d) Franchisee shall remove all of its Bins used in performance of Solid Waste Handling Services hereunder from the Premises of all Customers, and shall properly dispose of all Solid Waste in such Bins, within such time period as specified by the City Manager. If Franchisee fails to remove its Bins and dispose of all Solid Waste in such Bins as required pursuant to this

Section 15.5 within the time periods prescribed, City shall have the right to take any of such actions that have not been performed by Franchisee. Franchisee shall promptly reimburse City for all sums expended by City in taking such actions, along with a ten percent (10%) administrative fee.

15.6 City's Remedies Cumulative. The rights and remedies of City set forth in any Section herein shall be in addition to any and all other rights and privileges City may have, and shall not be deemed to limit any such other rights or privileges of City under this Agreement or by virtue of any law.

SECTION 16
FRANCHISEE'S REMEDIES; ADMINISTRATIVE HEARING

16.1 Administrative Hearing. Should Franchisee contend that City is in breach of any aspect of this Agreement, it shall give notice to the City Manager requesting an administrative hearing on the allegation. The hearing shall occur as soon as reasonably possible, or on such date as mutually agreed by the parties, and shall be held before an impartial hearing officer to be determined by the City Manager. The hearing officer shall make an advisory ruling on Franchisee's allegations, and suggest a remedy if a breach by City is determined to exist. The hearing officer's ruling and recommendations shall become final and binding if the Parties so agree in writing within 30 days of the date notice of the decision is given to the Parties. Otherwise, the hearing officer's ruling shall have no further force or effect.

16.2 Other Remedies; Claims. Franchisee shall be entitled to all available remedies in law or equity for City's breach of this Agreement; provided, however, Franchisee shall not file or otherwise commence any action against City, in law or equity, in any court, until after an administrative hearing as set forth above has been completed, and the above noted thirty (30) day period to accept the hearing officer's decision has passed, or either City or Franchisee has given timely written notice to the other that it will not accept the hearing officer's decision.

16.3 Actions for Damages. As a prerequisite to the filing and maintenance of any action for damages by Franchisee against City arising out of or relating to this Agreement, Franchisee shall present a claim to City, as required by Government Code section 910 et seq., within thirty (30) days of the date of the occurrence giving rise to the claim for damages.

SECTION 17
ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS

This Agreement shall not be sold, hypothecated, sublet, assigned, or otherwise transferred, nor shall any of the rights or privileges herein be hypothecated, leased, assigned, sold, or otherwise transferred, either in whole or in part, nor shall title thereto, either legal or equitable, or any right, interest, or property therein, pass to or vest in any person, except Franchisee, either by action or inaction of Franchisee or by operation of law, without the prior written consent of City which may be withheld with or without cause. For purposes of permitting Franchisee to subcontract with other haulers to assist in providing services hereunder, and provided Franchisee will continue to provide services hereunder with its own employees, the written consent of the City Manager shall

suffice. Any other transfer, sale, subcontract, hypothecation, assignment or lease shall require the written consent of the City Council as expressed by a Resolution. Any attempt by Franchisee to hypothecate, subcontract, lease, assign, sell, or otherwise transfer any right or interest in this Agreement without the written consent of City shall be null and void and shall give rise to City's right, but not obligation, to terminate this Agreement.

SECTION 18
GENERAL PROVISIONS

18.1 Force Majeure. Franchisee shall not be in default under this Agreement in the event that its ability to provide Solid Waste Handling Services in compliance with its obligation to do so hereunder is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, civil disturbances, insurrections, explosion, natural disasters such as floods, earthquakes, landslides, and fires, strikes, lockouts, and other labor disturbances or other catastrophic events which are beyond the reasonable control of Franchisee. The phrase "other catastrophic events" does not include the financial inability of Franchisee to perform or the failure of Franchisee to obtain any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due in substantial part to the acts or omissions of Franchisee.

18.2 Property Damage. Any physical damage caused by the negligent or willful acts or omissions of employees, agents, or subcontractors of Franchisee to private or public property shall be promptly repaired or replaced.

18.3 City's Authorized Agent. Excepting amendments hereto and such actions set forth herein specifically calling for City Council action or approval, the City Manager is authorized to take any action with regard to any matter, or enforce any right, set forth herein requiring action by City.

18.4 Amendments. Except as otherwise expressly stated herein, no amendment of this Agreement shall be valid unless in writing duly executed by the Parties.

18.5 Independent Contractor. It is expressly understood and agreed that Franchisee shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Franchisee shall have the exclusive control over the details of the services and work performed hereunder and all persons performing the same; that Franchisee shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Franchisee. Neither Franchisee nor its officers, employees, agents or subcontractors shall obtain any rights to retirement benefits, workers' compensation benefits or any other benefits which accrue to City employees and Franchisee hereby expressly waives any claim it may have, or hereafter acquire, to such benefits.

18.6 Law to Govern; Venue. The laws of the State of California shall govern this Agreement. In the event of litigation between the parties, venue and jurisdiction shall lie exclusively in a state court of competent jurisdiction in Orange County, California. The

parties agree to waive any potential claim to diversity jurisdiction under Title 28 U.S.C. § 1332 or any other statute, law or judicial authority which actually or colorably provides for federal jurisdiction. In the event of any legal proceeding this Agreement shall be interpreted as if jointly drafted by the Parties.

18.7 Successors and Assigns. The terms, covenants and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties.

18.8 Waiver. The waiver by either Party of any breach or violation of any term, covenant or condition of this Agreement shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach or violation of the same or of any other term, covenant or condition.

18.9 Notices. All notices, or other communications whatsoever which this Agreement contemplates or requires either Party to give to the other, shall, except as otherwise provided herein, be in writing and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, addressed to the respective party as follows:

To City: City of Irvine
City Hall
1 Civic Center Plaza
Irvine, California 92714
Attn: City Manager

To Franchisee: _____
_____
_____
_____

or to such other address as either Party may from time to time designate by notice to the other given in accordance with this Section. Notice shall be deemed given on the date served if served personally between the hours of 8:00 a.m. to 5:00 p.m. on any regular business day for City's business offices. If mailed, notice shall be deemed given three (3) business days from the date such notice is deposited in the United States mail in the manner proscribed above.

18.10 Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected unless their enforcement under the circumstances would be unreasonable, inequitable or would otherwise frustrate the purposes of this Agreement.

18.11 Attorneys' Fees and Litigation Costs. In the event either party brings any action or proceeding to enforce or interpret the terms or provisions of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable attorneys' fees and other litigation costs and expenses, including without limitation expert witness fees, consultant fees and costs, without regard to whether the matter proceeds to trial.

Without limiting its scope in any way, this provision is expressly intended to, and shall, apply to fees and costs incurred in any appeal.

18.12 Corporate Resolution. Concurrent with the execution of this Agreement, Franchisee shall provide City with a corporate resolution of its Board of Directors demonstrating the authority for the undersigned to enter and lawfully bind Franchisee to this Agreement, or in the event Franchisee is not a Corporation, with such evidence of authority as required by the City Manager.

18.13 Integration. This Agreement contains the entire integrated agreement and understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, promises, proposals, and agreements between the Parties, whether written or oral. The Parties acknowledge this document has been executed with the consent and upon the advice of counsel. Each of the Parties acknowledges that no party or agent or attorney of any other party has made any promise, representation, or warranty, express or implied, not contained in this Agreement, to induce the other party to execute this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates indicated below.

CITY OF IRVINE
a California municipal corporation

APPROVED AS TO FORM:

_____
City Attorney

Date:_____ By: _____
City Manager

ATTEST:

Date:_____ By: _____
City Clerk

Franchisee _____

Date:_____ By: _____

Title: _____

EXHIBIT A

Village Commercial Premises Map

EXHIBIT B

Workers' Compensation Insurance Certification

Contract Services Description:_____

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

(CHECK ONE APPLICABLE BOX BELOW)

☐ **I have and will maintain workers' compensation insurance**, as required by Section 3700 of the Labor Code, for the performance of the work to be performed under this Agreement and shall submit insurance certificates evidencing such coverage as set forth herein.

☐ I certify that, in the performance of the work under this Agreement, **I shall not employ any person** in any manner so as to become subject to the workers' compensation laws of California, and I hereby agree to indemnify, defend, and hold harmless the City of Irvine and all of its officials, employees, and agents from and against any and all claims, liabilities, and losses relating to personal injury or death, economic losses, and property damage arising out of my failure to provide such worker's compensation insurance. I further agree that, **if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions and immediately furnish insurance certificates** evidencing such coverage as set forth herein.

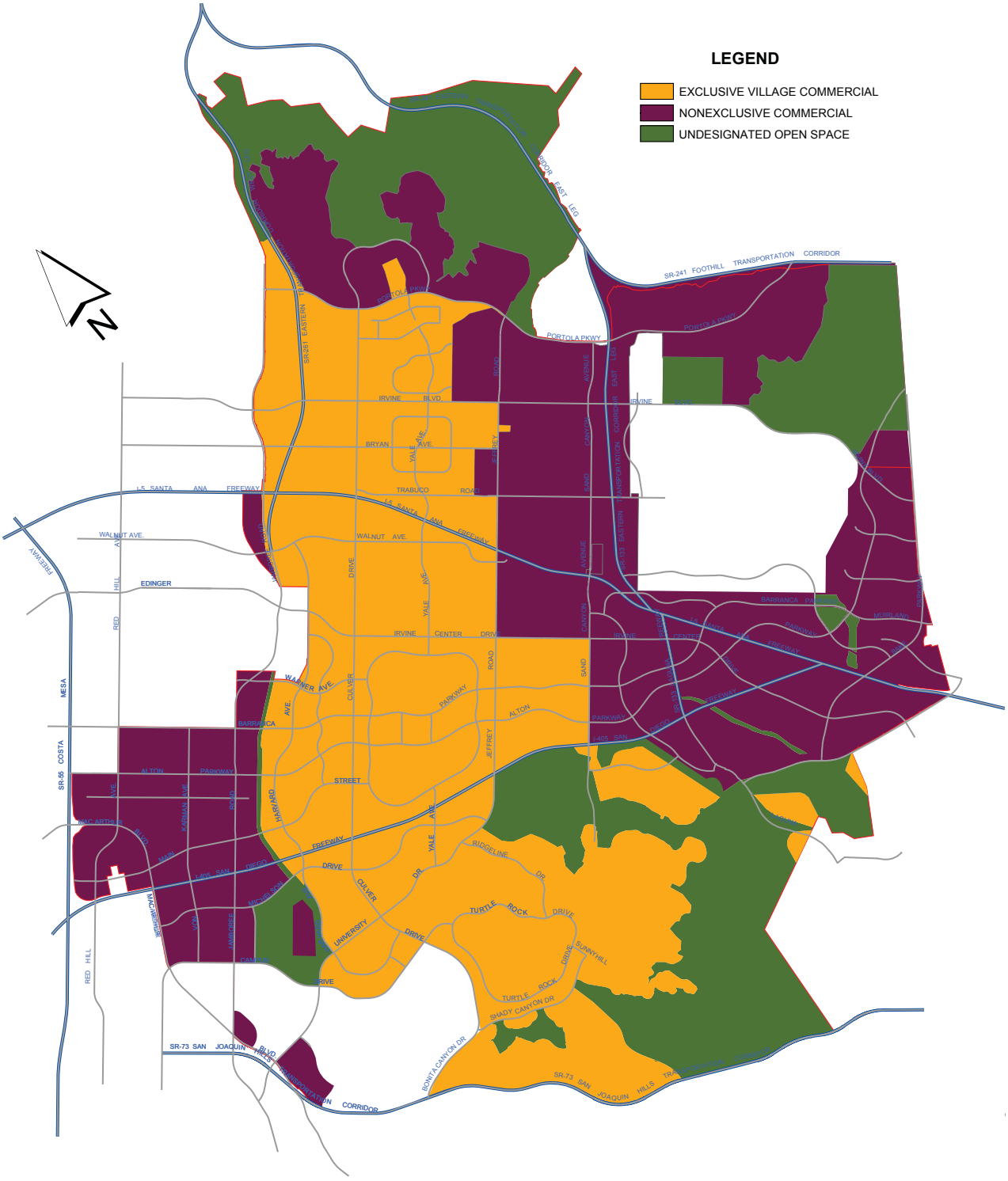
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Dated:	
Contracting Firm:	
Signature:	
Title:	
Address:	

Exhibit D

CITY OF IRVINE

COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

DATE: November 8, 2007 N:\Community Development\Building and Safety\GIS\projects\PublicWorks\BymeM_Waste_Collection_cm\BymeM_Waste_Collection_2007_11_07_cn.mxd

CITY COUNCIL ORDINANCE NO. 17-xx

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING NONEXCLUSIVE FRANCHISES FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES, FOR THE PERIOD OF OCTOBER 27, 2017 THROUGH AUGUST 31, 2026

WHEREAS, the Legislature of the State of California, by enactment of AB 939, established a solid waste management process that, among other things, requires every City to divert at least 50 percent of its waste from landfills or face possible fines of up to $10,000 per day; and

WHEREAS, to comply with AB 939, and specifically its 50 percent diversion goal, and to facilitate compliance with other related state recycling mandates, including AB341, AB1826, and Public Resources Code 40000 et al while at the same time fostering competition, the City Council of the City of Irvine hereby deems it necessary to implement a program to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and recycling; and

WHEREAS, the City Council has determined and finds that the public interest, health, safety and well-being will be served if the forgoing is accomplished through the continued award of nonexclusive franchises for the collection, disposal and processing of all solid waste generated in the City that is not already the subject of the City's exclusive franchise which, generally, refers to: (1) solid waste handling services occurring on a regular schedule (such as weekly service) at commercial premises (other than those designated as “village commercial” premises); and (2) temporary bin services, at any premises in the City (including residential premises and village commercial premises); and

WHEREAS, the City Council has adopted a Resolution of Intent declaring its intention to grant nonexclusive franchises for solid waste handling services, including recycling services, and thereafter held a public hearing to enable all persons desiring to be heard regarding the granting of such nonexclusive franchises; and

WHEREAS, Public Resources Code section 49300 and the Charter of the City of Irvine require the City Council to approve the terms of the proposed nonexclusive franchise agreements pursuant to an ordinance; and

WHEREAS, the provision of solid waste handling services is an activity supported in part through a public agency contract and therefore may be considered a “project” under the California Environmental Quality Act (“CEQA”) (Pub. Res. Code section 21000 et seq.) (14 Cal. Code Regs. section 15378(a)(2)); and

WHEREAS, it can be seen with certainty that there is no possibility that the project could have a significant effect on the environment in that the proposed franchise agreement, the form of which is attached hereto as Exhibit “1” (the “Franchise Agreement”), is merely the continuation of an existing service in the City.

NOW, THEREFORE, the City Council of the City of Irvine does ORDAIN as follows:

SECTION 1: Each of the above recitals is true and correct and is adopted by the City Council.

SECTION 2. The City Council finds that the approval of the Franchise Agreement is exempt from CEQA under the "common-sense" exemption set forth in CEQA Guidelines section 15061(b)(3).

SECTION 3. The City Council hereby approves the Franchise Agreement, and authorizes the City Manager to enter into the Franchise Agreement with any qualified solid waste enterprise pursuant to the provisions in Section 4 below.

SECTION 4. The City Council hereby approves the issuance of nonexclusive franchise agreements between the City of Irvine and qualified solid waste handling enterprises, pursuant to the terms set forth in the agreement attached hereto and incorporated herein by this reference, and hereby authorizes the City Manager to execute such agreements on behalf of the City pursuant to the provisions of Section 5 below.

SECTION 5: The City Manager is hereby authorized to execute franchise agreements in the form of the Franchise Agreement with qualified solid waste handling enterprises pursuant to the following process:

1. The City Manager shall require each prospective franchisee to file a Statement of Qualifications for nonexclusive commercial solid waste handling services prior to entering into any Franchise Agreement.

2. The City Manager shall endeavor to review the Statement of Qualifications within thirty (30) days after receipt of the same, for purposes of determining whether each prospective franchisee has the capabilities and experience to provide solid waste collection services in accordance with the terms of the Franchise Agreement.

3. Upon the City Manager's determination that a prospective franchisee has the capabilities and experience to provide solid waste collection services in accordance with the terms of the Franchise Agreement, the City Manager is hereby authorized to enter into a Franchise Agreement with such prospective franchisee.

4. During the first four (4) years of the term of the Franchise Agreement, the City Manager shall have authority to accept additional commercial solid waste haulers into the nonexclusive franchise. The City Manager shall not have authority to enter into any additional Franchise Agreements after August 31, 2021.

5. Any franchisee accepted pursuant to paragraph 4 above shall be subject to the review, approval, and granting process described in paragraphs 2 and 3 above.

SECTION 6: The City Clerk shall certify to the passage of this Ordinance and the same shall be published as required by law and shall take effect as provided by law.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the ___of _____2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on the 12th day of September 2017 and duly adopted at a regular meeting of the City Council of the City of Irvine held on the __ day of _____2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

EXHIBIT 1

NONEXCLUSIVE FRANCHISE AGREEMENT FOR COMMERCIAL SOLID WASTE COLLECTION

BETWEEN THE CITY OF IRVINE AND

_____

EFFECTIVE DATE:

_____

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NONEXCLUSIVE FRANCHISE AGREEMENT

This Nonexclusive Franchise Agreement ("Agreement") is entered into and effective as of _____, __, 2017, by and between the CITY OF IRVINE, a California municipal corporation ("City") and _____ ("Franchisee"), relating to the provision of certain Solid Waste Handling Services within the City which are not subject to City's Exclusive Franchise Agreement. City and Franchisee are referred to herein collectively as the "Parties" and individually as a "Party."

RECITALS

A. The Legislature of the State of California, by enactment of the California Integrated Waste Management Act of 1989 ("AB 939"), has declared that it is in the public interest to authorize and require local agencies to make adequate provision for the disposal of all Solid Waste within their jurisdictions. AB 939 requires, among other things, that every local agency Divert at least fifty percent (50%) of its Solid Waste from Landfills by the year 2000 or face possible fines of up to Ten Thousand Dollars ($10,000) per day.

B. City previously entered several nonexclusive franchise agreements with various franchisees, approved by City's City Council on November 27, 2007 (the "Prior Agreement").

C. The Prior Agreement expires on December 31, 2017, and the Parties enter this Agreement with the intent of restating and amending the Prior Agreement to: (i) reflect service standards and legal requirements in the Solid Waste industry which have changed over time, (ii) document agreed upon changes to the scope of the nonexclusive franchise granted in the Prior Agreement, and (iii) memorialize that this Agreement shall supersede the Prior Agreement, except with respect to certain continuing obligations as more specifically set forth herein.

D. It is the intent of the Parties that Franchisee, and not City, shall be solely responsible for establishing and collecting all charges for Solid Waste Handling Services provided by Franchisee pursuant to this Agreement.

E. City and Franchisee are mindful of the provisions of the laws governing the safe Collection, transport, Recycling, and disposal of Solid Waste, including AB 939, AB 341, AB 1594, AB 1826, RCRA, and CERCLA. City and Franchisee desire to leave no doubts as to their respective roles, and to memorialize that by entering into this Agreement City is not thereby becoming an "arranger" or a "generator" as those terms are used in CERCLA, and that it is Franchisee, not City, who is "arranging for" the Collection, transport for disposal, composting, and Recycling of municipal Solid Waste in the City which may contain Hazardous Substances. City and Franchisee understand and agree that it is Franchisee, and not City, who will arrange to collect Solid Waste, that City has not, and, by this Agreement does not, instruct Franchisee on its Collection methods, nor supervise the Collection process, nor do the Parties intend to place title to such Solid Waste in City, but rather intend that whatever, if any, title in and to such Solid Waste that otherwise might exist in or with City in the absence of this Agreement is hereby transferred to Franchisee, and further that if Franchisee gains title to such Solid Waste it is by operation of law and agreement with its Customers and is not the result of this Agreement. By entering this Agreement, City and Franchisee further desire to confirm that Franchisee has agreed to indemnify

City in connection with any claims relating to the inadvertent or intentional collection, transportation and/or disposal by Franchisee of Hazardous Contaminants that may occur in connection with Franchisee's performance under this Agreement in accordance with the terms and conditions set forth herein.

F. To comply with the Diversion requirements of AB 939 and support "Zero Waste" principles, as adopted by the City Council on July 10, 2007, pursuant to Irvine City Council Resolution No. 07-95, while at the same time fostering competition, City deems it necessary to implement a program, as reflected by this Agreement, to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and Recycling.

G. By entering into this Agreement, Franchisee agrees to provide such Services as are necessary to ensure City complies with the requirements of all Applicable Laws including specifically, without limitation, AB 939, AB 341, AB 1826, and Public Resources Code Section 40000, et seq., in connection with the Solid Waste Handling Services it provides hereunder, and represents and warrants that it has the experience and qualifications to conduct the services detailed herein.

H. The City Council hereby determines and finds that the public interest, health, safety and wellbeing will be served by entering this Agreement.

COVENANTS

Based upon the foregoing Recitals and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1
RECITALS

The Parties acknowledge the above Recitals are true and correct and incorporate them herein as if they were fully restated.

SECTION 2
DEFINITIONS

Whenever any term used in this Agreement has been defined by the California Public Resources Code or the Municipal Code, the definition of such term set forth therein shall apply unless the term is otherwise defined in this Agreement; and, terms defined in this Agreement shall have such meaning as defined in this Agreement for purposes of this Agreement. Otherwise, terms used in this Agreement shall have their ordinary meaning.

2.1 AB 341. "AB 341" shall mean Assembly Bill 341 from the 2011-2012 Regular Session of the California Legislature (Chapter 476, Statutes 2011), relating to mandatory commercial Recycling.

2.2 AB 939. "AB 939" shall mean the California Integrated Waste Management Act of 1989, currently codified as California Public Resources Code Section 40000 et seq., as it may be amended from time to time.

2.3 AB 1594. "AB 1594" shall mean Assembly Bill 1594 from the 2013-2014 Regular Session of the California Legislature (Chapter 719, Statutes 2014), relating to the ban on the use of Green Waste as alternative daily cover at landfills.

2.4 AB 1826. "AB 1826" shall mean Assembly Bill 1826 from the 2013-2014 Regular Session of the California Legislature (Chapter 727, Statutes 2014).

2.5 Animal Waste. "Animal Waste" shall mean animal carcasses, dead animals, and/or parts or portions of dead animals. Animal Waste shall not include manure.

2.6 Annual Report. "Annual Report" shall have the meaning ascribed in Section 10.1 of this Agreement.

2.7 Applicable Laws. "Applicable Laws" shall mean all federal, state, county, and local laws, regulations, rules, orders, judgments, decrees, permits, approvals, or other requirements of any governmental agency having jurisdiction over an aspect of this Agreement that are in force on the Effective Date, and as may be enacted, issued or amended thereafter, including without limitation City's Municipal Code, AB 341, AB 939, AB 1594, AB 1826, CERCLA, and RCRA.

2.8 Bins. "Bins" shall mean dumpsters, three yard bins, Recycling Bins, 10, 36 and 40 yard Roll-Off Boxes, commercial compactors, 10 yard lowboy containers, and any similar such devices, regardless of size or capacity, provided by Franchisee to any Customer for use in Solid Waste Handling Services.

2.9 CalRecycle. "CalRecycle" shall mean the State of California Department of Resources Recycling and Recovery, the department within the State Natural Resources Agency responsible for the administration of the Integrated Waste Management Act of 1989, California Public Resources Code Section 40000 et seq.("Act"), or any successor department or agency created or designated for such purpose pursuant to the Act.

2.10 CDI Processing Facility. "CDI Processing Facility" shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of Recycling or reuse.

2.11 CERCLA. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC §9601 et seq.).

2.12 City. "City" shall mean the City of Irvine, a municipal corporation, located in Orange County, California.

2.13 City Council. "City Council" shall mean the City Council of the City of Irvine.

2.14 City Indemnitees. "City Indemnitees" shall mean the City and its past and present elected and appointed officials, officers, commissions, boards, members, employees, representatives, agents, consultants, and volunteers.

2.15 City Limits. "City Limits" shall mean the territorial boundaries of the City together with all amendments and changes thereto, which boundaries are depicted on maps, incorporated herein by reference, that are kept on file in the office of the City Clerk of the City of Irvine, and which are from time to time amended to reflect changes.

2.16 City Manager. "City Manager" shall mean the City Manager of the City of Irvine or his or her designee.

2.17 Collect/Collection. "Collect" or "Collection" shall mean to take physical possession of, transport, and remove (i) Solid Waste from a Premises, or (ii) any other materials that do not otherwise constitute Solid Waste, but that are discarded by a Customer pursuant to this Agreement.

2.18 Collection Vehicles. "Collection Vehicles" shall mean vehicles used by Franchisee in the performance of Solid Waste Handling Services.

2.19 Commercial Premises. "Commercial Premises" shall mean property upon which a business activity is conducted, including but not limited to retail sales, services, manufacturing, assembling, storage, or wholesale operations, but excluding businesses conducted upon residential premises that are permitted under applicable zoning regulations and that do not constitute the primary use of the property. Commercial Premises include hotels, motels, assisted living facilities, convalescent centers, nursing homes, and institutional premises, including, without limitation, churches and private schools.

2.20 Construction and Demolition (C&D) Debris. "Construction and Demolition Debris" or "C&D Debris" shall mean Solid Waste generated, produced, or discarded in connection with construction, demolition, landscaping, land clearing, or general clean-up activities within the City, including, but not limited to, concrete, plaster, drywall, Green Waste, wood, wood scraps, metals, dirt, rock and rubble, without regard to whether such materials are Recycled.

2.21 County Agreement. "County Agreement" shall mean that certain Waste Disposal Agreement, as the same may be amended from time to time, entered into among various Orange County cities, including specifically the City of Irvine, and the County of Orange relating to the use of County landfills for the disposal of Solid Waste Collected in such cities, and which is on file in the office of the Clerk of the City of Irvine.

2.22 Customer. "Customer" shall mean any person or entity receiving Solid Waste Handling Services, including Recycling services, from Franchisee pursuant to this Agreement.

2.23 Diversion. "Diversion" or "Divert" shall mean the diversion of Solid Waste, in accordance with all applicable federal, state and local requirements, from disposal at Solid Waste Landfills or transformation facilities through Recycling, reuse, or composting.

2.24 Division 7. "Division 7" shall mean Title 6, Division 7 of City's Municipal Code, pertaining to Solid Waste, as it may be amended or recodified from time to time.

2.25 Dwelling Unit. "Dwelling Unit" shall have the meaning set forth in City Zoning Code Section 1-2-1, as of the Effective Date.

2.26 Effective Date. "Effective Date" shall mean October 26, 2017.

2.27 Environmental Laws. "Environmental Laws" shall mean all federal and state statutes, county, local and City ordinances concerning public health, safety and the environment including, by way of example and not limitation, CERCLA; RCRA; the Federal Clean Water Act, 33 USC §1251 et seq.; the Federal Clean Air Act, 42 USC §7401 et seq.; the Toxic Substances Control Act, 15 USC §2601 et seq.; the Occupational Safety and Health Act, 29 USC §651 et seq.; the California Hazardous Waste Control Act, California Health and Safety Code §25100 et seq.; the Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health and Safety Code §25300 et seq.; the Porter-Cologne Water Quality Control Act, California Water Code §13000 et seq.; the Safe Drinking Water and Toxic Enforcement Act, California Health and Safety Code §25249.5 et seq.; as currently in force or as hereafter amended, and all rules and regulations promulgated thereunder.

2.28 Exclusive Franchise Agreement. "Exclusive Franchise Agreement" shall mean that certain agreement with Waste Management Collection & Recycling, Inc., a California corporation, dba Waste Management of Orange County ("Waste Management"), or its permitted successor or assignee, effective as of September 1, 2016, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential Premises and Village Commercial Premises in the City, and all Premises and facilities owned and/or operated by City or, if such agreement is terminated prior to the end of the term thereof, an agreement entered into with another hauler on substantially similar terms as are set forth in the above-described agreement with Waste Management.

2.29 Exclusive Franchisee. "Exclusive Franchisee" shall mean the franchisee set forth in the Exclusive Franchise Agreement.

2.30 Exclusive Franchise Premises. "Exclusive Franchise Premises" shall mean those Premises subject to the Exclusive Franchise Agreement, and specifically all Residential Premises, all Village Commercial Premises (which term is defined to include all Mixed-Use Developments), and all Premises owned and/or operated by City.

2.31 Food Waste. "Food Waste" shall mean compostable Organic materials, excluding Green Waste, including but not limited to: (i) all food (including fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells); (ii) food-soiled compostable paper (including napkins, paper towels, paper plates); and (iii) tea bags, coffee grounds and filters.

2.32 Franchisee. "Franchisee" shall mean the entity identified as the "Franchisee" in the preamble to this Agreement, or any entity pursuant to the terms hereof permitted to become the successor or assignee thereof.

2.33 Franchise Fee. "Franchise Fee" shall mean the franchise fee set forth herein and more fully defined in Section 7.

2.34 Generator. "Generator" shall mean any person or entity that generates, produces, or discards Solid Waste, including Recyclable Material.

2.35 Green Waste. "Green Waste" shall mean any plant material that is kept separate from other Solid Waste at the point of generation and contains no greater than one percent (1%) of physical contaminants by weight. Green Waste includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and C&D Debris wood waste. Green Waste does not include food, food materials, biosolids, plant material mixed with Solid Waste, material processed from commingled waste, wood containing lead-based paint or wood preservative, or mixed C&D Debris.

2.36 Green Waste Composting Facility. "Green Waste Composting Facility" shall mean a Processing Facility that receives and processes Green Waste for the purposes of recycling or reuse. A Green Waste Composting Facility may also handle manure and paper products. A Processing Facility that handles feedstock that is not a Green Waste, manure, or a paper product shall not be considered a Green Waste Composting Facility.

2.37 Gross Receipts. "Gross Receipts" shall mean and include all monies, fees, charges, consideration, and revenue received by, or imputed to Franchisee and any affiliates, parent companies, subsidiaries and/or subcontractors of Franchisee, in connection with, arising from, or in any way attributable to the services carried out by or on behalf of Franchisee pursuant to this Agreement. Gross Receipts includes, without limitation, any amounts Collected by Franchisee from its Customers which reflects Tipping Fees or other costs incurred by Franchisee to provide services pursuant to this Agreement. As qualified exceptions to the above definition, and except as otherwise note below, Gross Receipts shall not include:

(a) Amounts Collected by Franchisee from its Customers which reflect that portion (if any) of the Franchise Fees imposed upon Franchisee by City which Franchisee may choose to pass on to its Customers; provided, however, any such amounts which exceed a Customer's pro-rata share of the Franchise Fee actually imposed upon Franchisee by City shall not be exempted from the definition of Gross Receipts.

(b) Revenue from the resale of Recyclable Materials.

2.38 Hazardous Contaminant. "Hazardous Contaminant" shall mean any "hazardous material," as that term is defined under California Health & Safety Code Section 25501(n); any "hazardous substance," as that term is defined herein or under California Health & Safety Code Sections 25281(h), 25501(n), and under Title 42, Section 9601(14) of the United States Code; any "hazardous waste," as that term is defined herein and under Title 42, Section 6903(5) of the United States Code and under California Health & Safety Code Section 25501(n); any chemical which the Governor has identified as a chemical known to the State to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term "Hazardous Contaminant" shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.

2.39 Hazardous Substance. "Hazardous Substance" shall mean any of the following: (a) any substances defined, regulated or listed (directly or by reference) as "Hazardous Substances," "hazardous materials," "Hazardous Wastes," "toxic waste," or "toxic substances" or similarly identified as hazardous to human health or the environment, in or pursuant to (i) CERCLA; (ii) the Hazardous Materials Transportation Act, 49 USC §5101, et seq.; (iii) RCRA; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7401 et seq.; and (vii) the California Water Code §13050; (b) any substances identified in any and all amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified and/or regulated as hazardous or toxic under any other applicable federal, state or local laws or regulations, including any of the Environmental Laws, currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl's ("PCBs"), petroleum, natural gas and synthetic fuel products, and by-products.

2.40 Hazardous Waste. "Hazardous Waste" shall mean all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code §25110.02, §25115, and §25117 or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to RCRA, all future amendments thereto, and all rules and regulations promulgated thereunder.

2.41 HHWE. "HHWE" shall mean City's Household Hazardous Waste Element approved by the State of California pursuant to the requirements of AB 939.

2.42 Inert Debris. "Inert Debris" shall mean Solid Waste that is Source-Separated or separated for reuse; does not contain Hazardous Waste, Hazardous Contaminants, Hazardous Substances, or soluble pollutants at concentrations in excess of water quality objectives set by applicable Federal, State, and local authorities, including the City; and does not contain significant quantities of decomposable waste. Inert Debris may not contain more than 1% putrescible waste by volume calculated on a monthly basis, and the putrescible wastes shall not constitute a nuisance, as determined by the City Manager.

2.42.1 Type A Inert Debris. "Type A Inert Debris" shall mean C&D Debris, including but not limited to concrete, fully cured asphalt, glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products, that meets the definition of "Inert Debris."

2.43 Landfill. "Landfill" shall mean a Solid Waste landfill as defined by Public Resources Code Section 40195.1 for which a current Solid Waste facilities permit has been issued by CalRecycle or which is currently permitted under the regulatory scheme of another state.

2.44 Material Recovery Facility (MRF). "Material Recovery Facility (MRF)" shall mean a Processing Facility permitted by the State of California where Solid Waste and/or Recyclable Materials are sorted or separated, by hand or by use of machinery, for the purpose

of Recycling, reuse, and/or composting, and which can reasonably demonstrate through documentation an average annual Diversion rate of at least fifty percent (50%).

2.45 Medical Waste. "Medical Waste" shall mean waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including, without limitation, blood-soaked bandages, culture dishes and other glassware, discarded surgical gloves, discarded surgical instruments, discarded needles used to give shots or draw blood (e.g., medical sharps), cultures, stocks, swabs used to inoculate cultures, removed body organs (e.g., tonsils, appendices, limbs), and discarded lancets.

2.46 Mixed-Use Development. "Mixed-Use Development" shall mean Premises where Bins are shared by Customers from both Commercial Premises and Multi-Family Dwellings. Mixed-Use Developments shall be deemed to be Village Commercial Premises for purposes of this Agreement. The term Mixed-Use Development has been defined for purposes of this Agreement, and is specifically intended to have a different definition and meaning than the term "Mixed-use development" as set forth and defined in City's Municipal Code.

2.47 Multi-Family Dwelling. "Multi-Family Dwelling" shall mean any building or lot containing more than one Dwelling Unit and at which the Dwelling Units receive Solid Waste Handling Services through the use of shared Bins pursuant to the terms of the Exclusive Franchise Agreement.

2.48 Municipal Code. "Municipal Code" shall mean City's Municipal Code of Ordinances, including City's Zoning Code, and all uncodified ordinances duly adopted by City, as such may be amended from time to time.

2.49 NPDES. "NPDES" shall mean the National Pollutant Discharge Elimination System, a permit program established by the 1987 Water Quality Act to control non-point source pollution.

2.50 Organics. "Organics" shall mean Food Waste and Green Waste.

2.51 Premises. "Premises" shall mean any land, building and/or structure, or portion thereof, in the City where Solid Waste is produced, generated or accumulated.

2.52 Processing Facility. "Processing Facility" shall mean a facility approved pursuant to Section 3.6 of this Agreement that receives or processes Solid Waste, including but not limited to MRF's.

2.53 RCRA. "RCRA" shall mean the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. § 9601 et seq.).

2.54 Recycle or Recycling. "Recycle" or "Recycling" shall mean the process of Collecting, sorting, cleaning, treating and/or reconstituting materials that would otherwise be disposed of and returning these materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products.

2.55 Recyclable Material (Recyclables). "Recyclable Material" or "Recyclables" shall mean that Solid Waste discarded within Premises that are subject to this Agreement and which is capable of being Recycled.

2.56 Residential Premises. "Residential Premises" shall mean all Premises upon which Dwelling Units exist.

2.57 Solid Waste. "Solid Waste" shall mean and include all discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction waste, industrial waste, commercial Solid Waste, bulky items, and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of "Nonhazardous Solid Waste" set forth in the California Code of Regulations, as it may be amended from time to time. Solid Waste does not include Hazardous Contaminants, Hazardous Substances, Hazardous Waste, low-level radioactive waste, untreated Medical Waste, or Special Wastes.

2.58 Solid Waste Handling Services. "Solid Waste Handling Services" shall mean the Collection, and thereafter the transfer, transport, Recycling, processing, and disposal of Solid Waste.

2.59 Source Reduction. "Source Reduction" shall mean the process of reducing the amount of Solid Waste generated by the person or organization generating such Solid Waste.

2.60 Source Separation. "Source Separation" or "Source-Separated" describes the segregation of Recyclable Materials from other Solid Waste by the Generator, combined with Franchisee's use of a collection process for such segregated Recyclable Materials by which they are kept segregated and are delivered to a Processing Facility for Recycling purposes, or to another destination for Recycling, reuse, or end-use purposes.

2.61 Special Wastes. "Special Wastes" shall mean waste materials including sewage, sludge, industrial sludge, asbestos, auto bodies, tires, used motor oil, Animal Waste, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling.

2.62 SRRE. "SRRE" shall mean City's Source Reduction and Recycling Element approved by the State of California pursuant to the requirements of AB 939.

2.63 State-Mandated Compliance Reports. "State-Mandated Compliance Reports" shall mean all reports required for City to meet its reporting obligations imposed by statutory mandates, including, but not limited AB 939, AB 341, and 1826, and the regulations implementing such mandates.

2.64 Temporary Bin Service. "Temporary Bin Service" shall mean Solid Waste Handling Services provided by a Solid Waste enterprise on an as needed and temporary basis to any Premises within the City in connection with, including but not limited to, construction, demolition, cleanup or other projects that do not qualify as a "Covered Project" pursuant to Section 6-7-901 of the Irvine Municipal Code, and by use of temporarily placed Bins.

2.65 Term. "Term" shall have the meaning ascribed in Section 5 of this Agreement.

2.66 Tipping Fee. "Tipping Fee" shall mean the fee charged to Franchisee to dispose of Solid Waste at a Landfill, Processing Facility, or other disposal location.

2.67 Transformation. "Transformation" shall mean incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. "Transformation" does not include composting.

2.68 Village Commercial Premises. "Village Commercial Premises" shall mean that subset of Commercial Premises which have been designated by City as falling within the scope of the Exclusive Franchise Agreement, and which the Parties agree are not within the scope of the nonexclusive franchise granted by this Agreement. The specific Commercial Premises which are designated as Village Commercial Premises for purposes of this Agreement are (i) those Commercial Premises which are located in areas designated as "Exclusive Village Commercial" on the Village Commercial Premises Map, attached hereto as Exhibit A; (ii) Mixed-Use Developments, whether currently in existence or developed in the future, which are deemed for purposes of this Agreement to be Village Commercial Premises, regardless of their location and whether or not said location is designated as "Exclusive Village Commercial" on the Village Commercial Premises Map; and (iii) any Commercial Premises within Planning Area 51 that is re-designated following the Effective Date to a Village Commercial Premises designation as a result of an amendment to the Village Commercial Premises Map pursuant to the terms hereof. Notwithstanding anything herein to the contrary, Village Commercial Premises shall not include hotels, motels, assisted living facilities, convalescent centers or nursing homes, regardless of their location.

2.69 Village Commercial Premises Map. "Village Commercial Premises Map" shall mean the map attached hereto as Exhibit A, titled "Commercial Solid Waste Collection Service Areas." The purpose of the Village Commercial Premises Map is to designate which Commercial Premises are designated as "Exclusive Village Commercial" Premises for purposes of this Agreement, and are thereby within the scope of the Exclusive Franchise Agreement and conversely outside of the scope of the nonexclusive franchise granted by this Agreement. The Village Commercial Premises Map is not intended to identify the location of Residential Premises, including Premises at which Mixed-Use Developments exist; and, accordingly, Mixed-Use Developments (which are deemed to be Village Commercial Premises) may exist in areas designated as "Nonexclusive Commercial" on the Village Commercial Premises Map.

SECTION 3
NONEXCLUSIVE FRANCHISE

3.1 Grant of Franchise.

3.1.1 General Grant. City hereby grants to Franchisee, and Franchisee shall have throughout the duration of this Agreement, the nonexclusive franchise, right, license and privilege to provide Solid Waste Handling Services within the City Limits, with respect to Solid Waste not subject to the Exclusive Franchise Agreement. Generally speaking, the rights granted

herein pertain to: (1) Solid Waste Handling Services to Commercial Premises, excepting Village Commercial Premises, occurring on a regular schedule (such as weekly service); and (2) Temporary Bin Services to any Premises in the City (including Exclusive Franchise Premises). In the event of any uncertainty, ambiguity, and/or dispute as to whether a particular Premises is subject to the Exclusive Franchise Agreement, the determination shall be made by the City Manager, and such determination shall be final. The Parties agree that any such determination is occurring pursuant to Public Resources Code Section 49523, is agreed to by the Parties upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement.

3.1.2 Amendments to Scope of Franchise: The Parties acknowledge that as of the Effective Date, the Village Commercial Premises Map includes that certain land area located in the City's Great Park known as "Planning Area 51" and further shows a current conceptual plan by which to divide Planning Area 51 into individual "Districts." The City has not yet finalized its plans for Planning Area 51, and final Districts and boundaries therefore have yet to be established. Once the final planning for Planning Area 51 is complete, the Village Commercial Premises Map will be amended to depict those premises within Planning Area 51 that are designated as "Exclusive Village Commercial" Premises and those which are designated as "Nonexclusive Commercial" Premises. As of the Effective Date (but subject to change in the future as final plans for Planning Area 51 develop), it is anticipated that land currently shown as Districts 1, 4, 5, 7 and 8 within Planning Area 51 will be developed primarily for residential purposes, and accordingly City anticipates such Districts within Planning Area 51 will be designated as Village Commercial Premises. Moreover, City anticipates that land shown as Districts 2, 3, and 6 within Planning Area 51 will not be developed for residential purposes, and accordingly City does not anticipate designating such Districts within Planning Area 51 as Village Commercial Premises. City shall have the exclusive right to exercise its discretion to determine whether to designate properties within Planning Area 51 as Village Commercial Premises, although in doing so City will bear in mind the following: (i) City's primary consideration will be to minimize Collection Vehicle traffic in Residential Premises; (ii) the Village Commercial Premises designation is intended to apply to Premises located in close proximity to residential areas, which are established to provide for the unified commercial needs of neighborhood residents. Franchisee agrees that City may amend the Village Commercial Premises Map from time to time to reflect changes to Planning Area 51 as its planning is finalized by City, and that such changes will be reflected on amended maps to be maintained by the City Manager. Moreover, the Parties agree that any such changes effectuated by such amendments to the Village Commercial Premises Map are occurring pursuant to Public Resources Code Section 49523, are agreed to by the Parties upon mutually satisfactory terms, and are part of the consideration for entering into this Agreement. Franchisee expressly acknowledges that any change in scope of the franchise granted hereunder that may occur during the term hereof as a result of a change to the Village Commercial Premises Map as described in this Section is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524.

3.1.3 Encroachment on Public Rights-of-Way. Included in the rights granted hereunder, is the right for Franchisee to place Bins in City's public rights-of-way, subject to the provisions of Division 7.

3.2 Limitations on Scope of Franchise.

3.2.1 Nonexclusive. This Agreement shall be nonexclusive, and no provision hereof shall be deemed to require City to grant similar franchises to one or to any particular number of franchisees, nor to restrict or prohibit City from doing so. Franchisee understands and acknowledges City may enter similar nonexclusive franchise agreements pursuant to the same, or substantially similar terms, with any qualified Solid Waste enterprise.

3.2.2 Exclusions. Notwithstanding any other provisions set forth in this Agreement to the contrary, the nonexclusive contract, right, franchise, license, and privilege granted herein excludes:

(a) Solid Waste Handling Services for Exclusive Franchise Premises as defined by this Agreement.

(b) except as provided otherwise herein, the Collection, transportation, or disposal of Hazardous Contaminants; Hazardous Substances; Hazardous Waste; items commonly known in the waste industry as "universal waste" and/or "e-waste"; biohazardous waste; untreated Medical Waste; infectious waste; Animal Waste; used cooking fats, oils, grease and similar waste; Special Waste; or other materials which do not constitute Solid Waste.

(c) Those Solid Waste Handling Services, if any, which are governed by or subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.3 Rights in Annexed Territories. It is the intention of the Parties that, subject to all of the limitations set forth in Section 3.2 above, the nonexclusive franchise granted herein shall apply to any property incorporated into the City Limits during the Term hereof; provided, however, the exercise of the rights granted herein within annexed territories shall be limited by and subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.4 Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523. If Franchisee has a pre-existing permit, license, agreement, franchise or other rights to provide services in the City, including because of being a Franchisee under the Prior Agreement, then Franchisee expressly acknowledges that any change or modification to the scope of such rights that may be effectuated by this Agreement is occurring pursuant to Public Resources Code Section 49523, is included herein upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement. Moreover, Franchisee expressly acknowledges that any change in scope of such prior rights is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524. Franchisee acknowledges that City has advised it that if it has rights pursuant to Public Resources Code Section 49520 which it does not wish

to modify by entering this Agreement, it may choose to continue to operate in City pursuant to such rights rather than enter into this Agreement.

3.5 Notice Pursuant to Public Resources Code Section 49520. The rights granted pursuant to the terms hereof shall expire upon the end of the Term of this Agreement as set forth in Section 5 below. Franchisee shall have no right to continue to provide services in City pursuant to Public Recourses Code Section 49520, or otherwise, following the end of the Term hereof unless a subsequent franchise, contract, or permit is granted to Franchisee by City, or unless this Agreement is amended to provide such rights. This provision is intended to, and shall serve as the notice contemplated by Section 49520 with respect to the franchise rights granted herein.

3.6 Processing Facility Approval.

3.6.1 Approval Required. In order for a Processing Facility to qualify as a CDI Processing Facility, Green Waste Composting Facility, or MRF for purposes of the Franchise Fee calculation, the Processing Facility must be approved by the City pursuant to this Section 3.6 at all relevant times. Facilities that are not approved pursuant to this Section 3.6 at all relevant times shall be considered "other disposal facilities" for purposes of the Franchise Fee calculation.

3.6.2 Processing Facility Audit. City reserves the right to the full extent permissible by law to deny approval to any Processing Facility that does not permit City to audit the Processing Facility for appropriate Franchise Fee and Diversion allocations. The audit may include, but is not limited to, requests for a detailed summary of the facility operations, visual inspections of the facility's sorting and other processes, reviews of Diversion calculation methodology, and requests for an adequate explanation of the selection process of loads to be sorted or directed for disposal.

3.6.3 Other Jurisdiction Approval. If another jurisdiction has provided written approval to a particular Processing Facility, the City may, but is not required to, accept this approval in lieu of its own approval process.

3.6.4 Processing Facility Approval List. Upon request, Franchisee may obtain an approved Processing Facility list from the City Manager. Any requested changes or additions to the approved Processing Facility list shall be submitted to the City Manager in writing. Franchisee must obtain the City Manager's written approval prior to Franchisee's use of any facility not appearing on the approved Processing Facility list.

3.6.5 Approval Timeframe. Processing Facility approval shall be at the sole discretion of the City Manager. Approval decisions shall be made in a timely manner following a request for approval. The City estimates typical approval review may take up to thirty (30) days. The City may provide temporary approval for facilities in cases where a lengthy audit or additional information is being prepared or reviewed.

SECTION 4
ACCEPTANCE; WAIVER

Franchisee agrees to be bound by and comply with all the requirements of this Agreement. Franchisee waives Franchisee's right to challenge the terms of this Agreement under federal, state, or local law, or administrative regulation. Additionally, by and upon the execution of this Agreement, Franchisee agrees to the termination of the Prior Agreement as of the Effective Date, agrees to waive any and all rights under the Prior Agreement, and agrees to release and hold the City harmless from any of the City's obligations thereunder (excepting, however, the right to compensation accrued and unpaid for services provided prior to the Effective Date); provided, however, nothing contained in this provision is intended to or shall relieve Franchisee from any obligation existing under the Prior Agreement pertaining to insurance, indemnification, or other legal obligations to City or Franchisee's Customers (as opposed to obligations to provide service pursuant to the terms thereof), or from any obligation set forth in the Prior Agreement which are called out as surviving the termination thereof, and all such obligations, including specifically those indemnification obligations relating to Environmental Laws, general liability, and AB 939 shall survive the termination of the Prior Agreement.

SECTION 5
TERM

The term of this Agreement shall commence on October 26, 2017 and end at midnight on August 31, 2026, unless this Agreement is terminated at an earlier date pursuant to Section 15 hereof, or otherwise.

SECTION 6
CONDITIONS TO EFFECTIVENESS OF AGREEMENT

The satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City in writing, is a condition precedent to the effectiveness of this Agreement:

6.1 Accuracy of Representation. All representations and warranties made by Franchisee and set forth in this Agreement shall be accurate, true, and correct on and as of the Effective Date of this Agreement.

6.2 Absence of Litigation. There shall be no litigation pending in any court challenging the award of this Agreement to Franchisee or the execution of this Agreement or seeking to restrain or enjoin its performance.

6.3 Furnishing of Insurance and Bond or Letter of Credit. Franchisee shall have furnished evidence of the insurance and Surety required by Section 14 hereof, and shall comply with all ongoing requirements relating thereto.

6.4 Effectiveness of City Council Action. The City Council Ordinance approving this Agreement shall have become effective pursuant to California law.

SECTION 7
FRANCHISEE'S CONSIDERATION

As part of its consideration for the nonexclusive franchise rights contained herein, Franchisee shall provide a Franchise Fee in compliance with this Section 7.

7.1 Franchise Fee Payment. Franchisee shall pay to City, in lawful money of the United States, the Franchise Fee as calculated pursuant to Section 7.2 during the entire Term of this Agreement. Said Franchise Fee shall be due to City in four (4) quarterly payments, which shall be due on or before the forty-fifth (45th) day after the end of each calendar quarter (January-March, April-June, July-September, October-December). The Franchise Fee shall be delivered to the City Manager on or before May 15, August 14, November 14, and February 14. Franchise Fee payments shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the amounts paid.

7.2 Franchise Fee Calculation. City intends the Franchise Fee calculation procedure to promote Diversion. Franchise Fee calculation is based on Franchisee's Gross Receipts and the percentage of Solid Waste Franchisee delivered to, and that was accepted by, various Processing Facilities and other disposal facilities during the immediately preceding calendar quarter. Franchise Fees due to the City shall be paid quarterly and accompanied by a calculation form developed and approved by the City, signed and completed by the Franchisee. The amount of Franchise Fees due to the City shall be determined by:

(a) calculating the total Gross Receipts derived from the Collection of Solid Waste in the City by Franchisee for the quarterly period;

(b) determining the percentage share of total Gross Receipts attributed to the Collection of Solid Waste according to the percentage of the total Collected Solid Waste delivered by Franchisee to each of the various Processing Facilities and other disposal facilities identified in this Section 7.2; and

(c) calculating and paying Franchise Fees on such Gross Receipts at the following rates based on the type of Processing Facility or other disposal facility utilized by the Franchisee during the quarter, such that on that portion of total Gross Receipts derived from Solid Waste Collected and delivered to:

(i) a Landfill, the Franchise Fee shall be 10%;

(ii) a MRF, the Franchise Fee shall be 3%;

(iii) a CDI Processing Facility, the Franchise Fee shall be 0%;

(iv) a Green Waste Composting Facility, the Franchise Fee shall be 0%;

(v) an end user approved by the City Manager in writing, the Franchise Fee shall be 0%; and

(vi) other disposal facilities, the Franchise Fee shall be 10%.

By way of example only, under the Franchise Fee calculation methodology described in this Section 7.2, a Franchisee that earns $60,000 in Gross Receipts by collecting 100,000 tons of Solid Waste in a given calendar quarter, and delivers half of the Collected waste tonnage to the Landfill and the other half of the Collected waste tonnage to a MRF, would pay a total of $3,900 in Franchise Fees (equal to a 10% Franchise Fee on that portion of the Gross Receipts attributed to Solid Waste landfilled and a lower 3% Franchise Fee on that portion of Gross Receipts attributed to Solid Waste delivered by Franchisee to a MRF.

7.3 Franchise Fee Review. The Franchise Fee calculation percentages specified in Section 7.2 will be reviewed by City on an ongoing basis, but not more often than annually, and if deemed necessary or appropriate by City, may be reduced or increased by approval of the City Council. City shall provide Franchisee with ninety (90) days advance written notice of any fee adjustment before such an adjustment shall take effect.

SECTION 8
ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS

In the event Franchisee fails to make any of the payments provided for in this Agreement on or before the dates due, Franchisee shall pay as consideration the following amounts:

8.1 A sum of money equal to the Franchise Fee due;

8.2 A sum of money equal to five percent (5%) of the amount due. This amount is required in order to defray those additional expenses and costs incurred by City by reason of the delinquent payment including, but not limited to, the cost of administering, accounting for, and collecting said delinquent payment and the cost to City of postponing services and projects necessitated by the delay in receiving the revenue; and

8.3 Interest on the delinquent sum (excluding the late payment charge referred to in Section 8.2) at the maximum legal rate, with said sum to be applied as interest for loss of use of the money due and to be calculated commencing on the date first due through and including the date upon which full payment, including all interest and penalties, is made.

SECTION 9
OPERATING PROCEDURES

9.1 General. Franchisee shall furnish all labor, supervision, materials, supplies, and equipment necessary to provide Solid Waste Handling Services in accordance with the terms of this Agreement.

9.2 Compliance with Applicable Laws. Franchisee shall fully comply with all Applicable Laws, including without limitation, Division 7 as it may be amended from time to time. Franchisee shall obtain and maintain, at Franchisee's sole cost and expense, all permits and licenses applicable to Franchisee's operations under this Agreement, including specifically, without limitation, a City of Irvine Business License.

9.3 Vehicles and Equipment. All Collection Vehicles and all Bins used by Franchisee in the performance of Solid Waste Handling Services hereunder shall comply with the vehicle and equipment requirements set forth in Division 7 and the provisions of this Section 9.

9.3.1 General Requirements for Collection Vehicles. All Collection Vehicles shall comply with all rules and regulations of the South Coast Air Quality Management District, the Air Resource Board, and any other regulatory body that may be in effect during the Term of this Agreement, as well as other federal, state and local laws and regulations that may be enacted during the Term of this Agreement. All Collection Vehicles shall meet or exceed such air quality standards as may be adopted by the forgeoing regulatory bodies during the Term. All Collection Vehicles shall comply with the requirements in the South Coast Air Quality Management District's ("SCAQMD") Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles).

9.3.2 Specific Requirements for Collection Vehicles. Each Collection Vehicle utilized by Franchisee in the performance of Solid Waste Handling Services shall meet the following minimum standards:

(a) Each Collection Vehicle shall be fueled by clean air technology in accordance with Applicable Laws.

(b) Each Collection Vehicle shall be registered with the California Department of Motor Vehicles.

(c) Each Collection Vehicle shall be inspected regularly by Franchisee to ensure it meets the requirements of the California Vehicle Code and the California Highway Patrol. Franchisee shall provide copies of its Biannual Inspection of Terminal inspection reports to City within thirty (30) days of its receipt of such reports and shall make all records related to its Collection Vehicles, including Franchisee's maintenance records, available to City upon request by the City Manager.

(d) Each Collection Vehicle shall be equipped with devices capable of covering every open section of the Collection Vehicle in which Solid Waste may be placed and, while operating upon the public rights-of-way, shall be covered so as to prevent any Solid Waste from falling or being blown or otherwise dislodged from the Collection Vehicle.

(e) Each Collection Vehicle shall be continuously maintained so as to both: (1) meet the highest industry standards with regards to efforts to prevent liquid from leaking and to the degree possible ensure each Collection Vehicle is "watertight" and "leak-proof" and, (2) at all times comply with the provisions of all Applicable Laws, including, without limitation, the Vehicle Code and any applicable NPDES permit, with regard to materials leaking from Collection Vehicles. Franchisee shall be responsible to promptly clean any spillage or Solid Waste that leaks or otherwise escapes the Collection Vehicle.

(f) As frequently as determined necessary by the City Manager, each Collection Vehicle shall be painted and shall have routine body work performed so that such vehicles do not become unsightly, as determined by the City Manager.

(g) Franchisee's name, local or toll free telephone number, and a vehicle number shall be visibly printed or painted in letters not less than five (5) inches in height on both sides of each Collection Vehicle. Any other information or signage printed, painted, or displayed on Franchisee's Collection Vehicles, when such vehicles are providing Collection services within City Limits, shall be subject to approval by City. Collection Vehicles are not required to be for exclusive use in the City.

(h) Each Collection Vehicle shall be maintained in a clean and sanitary condition both inside and out and shall be washed at least once every seven (7) calendar days and steam cleaned on a regular basis.

(i) Each Collection Vehicle shall carry a broom, shovel, and operable fire extinguisher, and shall be equipped with a communication device sufficient to allow the driver to communicate directly with Franchisee's dispatcher and/or main office.

(j) Each Collection Vehicle shall be kept in good repair and working order, and shall be equipped with appropriate safety equipment, including any new safety related technologies that become standard in the waste industry, and at a minimum shall have a video monitor-based back-up system, or its equivalent. Franchisee shall keep a sufficient supply of replacement parts and equipment on hand to ensure adequate vehicle maintenance and timely and continuous performance of the Solid Waste Handling Services contemplated by this Agreement.

(k) Franchisee shall inspect each Collection Vehicle daily to ensure that all equipment is operating properly. Collection Vehicles which are not operating properly shall be removed from service until repaired and operating properly. Franchisee shall perform all scheduled maintenance functions upon Collection Vehicles in accordance with the manufacturer's specifications and schedule. Franchisee shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a safe and operable condition. Franchisee shall keep accurate records of all Collection Vehicle maintenance and repair, recorded according to date and mileage, including signed verifications that repairs and maintenance have been properly performed, and shall make such records available to City upon request.

(l) No Collection Vehicle shall be utilized if it is leaking brake, hydraulic, or other fluids, and Franchisee shall clean up any leaks or spills from its Collection Vehicles per the NPDES permits in effect at the time. No fluids shall be washed into storm drains at any time. All NPDES dry-cleaning measures shall be complied with. All Collection Vehicles must be equipped with absorbent for such cleanup efforts.

(m) Franchisee shall annually furnish City a written inventory of all equipment, including Collection Vehicles, used in providing Solid Waste Handling Services pursuant to this Agreement. This inventory shall list all equipment by manufacturer, ID number, date of acquisition, type and capacity.

(n) Franchisee shall utilize Collection Vehicles of a size, weight, nature, and type so as to not be unreasonably intrusive on the community with respect to noise, emissions,

maneuverability, safety, and other factors, and to avoid or minimize pavement damage and wear and tear of the street or adjacent properties, as approved by the City Manager.

(o) Franchisee shall not load Collection Vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local laws or regulations. Noise levels of equipment used for Collection shall not exceed 75db (seventy-five decibels) when measured at a distance of twenty-five (25) feet from the Collection Vehicle, five (5) feet from the ground.

(p) The average fleet age, when applied to all Collection Vehicles used by Franchisee within City Limits, shall be no more than ten (10) years of age at any time during the Term, nor may any Collection Vehicle be purchased for use within City Limits that is over seven (7) years of age at the time of purchase. For purposes of the average fleet age requirement, Collection Vehicles refurbished to specifications approved by the City Manager shall be considered as new when placed back into service.

9.3.3 Specific Requirements for Bins.

(a) Franchisee shall be responsible to maintain and replace, as necessary, all of its Bins.

(b) All of Franchisee's Bins shall be maintained by Franchisee in good repair, and any question as to the meaning of this standard shall be resolved by the City Manager.

(c) Franchisee shall ensure it maintains an accurate list that contains the total number and type of its Bins at each service address, as well as the frequency of Collection for each such Bin. Franchisee shall keep this list up to date at all times, provide it to City upon request, and shall include a current updated list with each Annual Report submitted pursuant to Section 10.1.

(d) All Bins which are used primarily for the disposal of Solid Waste containing liquids shall be maintained by Franchisee in a watertight condition; and shall at all times comply with the provisions of any applicable NPDES permit.

(e) Franchisee shall replace any damaged or unsightly Bins, and shall remove any graffiti that appears on its Bins, within one (1) business day after becoming aware of the damage or unsightly condition.

(f) All Bins shall be kept freshly painted in a uniform fashion.

(g) Franchisee's name and local telephone number shall be placed on all front load bins and roll-off boxes used for Solid Waste Handling Services within the City, in letters not less than three (3) inches high, so as to be visible when the Bin is placed in use. Any smaller wheeled style automated carts shall contain, at a minimum, Franchisee's name and a distinct logo or identification number.

9.4 Performance Standards. Franchisee shall perform Solid Waste Handling Services hereunder in a workmanlike manner consistent with good housekeeping standards

and all relevant provisions of Applicable Laws, including without limitations, the provisions of Division 7.

9.5 Noise and Disruption. Franchisee shall perform Solid Waste Handling Services hereunder in such a manner as to minimize noise and other disruptive impacts including, without limitation, those upon traffic.

9.6 Restriction on Manner of Collection.

9.6.1 No Commingling Without Consent. In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material Collected within the City Limits and processed, Recycled and/or disposed pursuant to this Agreement, no load of Solid Waste Collected by Franchisee from within the City Limits shall be commingled with Solid Waste collected by Franchisee from any person or place outside the City Limits or outside the area governed by this Agreement. Notwithstanding the foregoing, City, in its sole and absolute discretion, may allow Franchisee to commingle Solid Waste or Recyclable Material it Collects within the City Limits with that collected from persons or places outside the City Limits or outside the area governed by this Agreement, if:

(a) Franchisee proposes a means acceptable to City by which to accurately identify and report the Solid Waste and Recyclable Material collected from both within and outside the City Limits and specifically within areas covered by this Agreement as distinctive from areas not covered by this Agreement; and

(b) Franchisee obtains written consent from the City Manager to implement commingling pursuant to any such proposal; and

(c) Franchisee's proposal as approved by the City Manager is successfully implemented such that timely and accurate information regarding the Solid Waste and/or Recyclable Material Collected from within the City Limits, and specifically within areas covered by this Agreement, and the amount of Solid Waste and/or Recyclable Material Collected within the City that is Diverted from Landfills as a result of Recycling or other programs, is provided for all reporting purposes; and

(d) Franchisee's proposal meets all obligations that may exist relating to the use of certain Landfills for deposit of Solid Waste Collected in the City, including any such obligations imposed by the County Agreement.

9.6.2 Withdrawal of Consent for Commingling. The City Manager may, by giving written notice to Franchisee, with or without cause, withdraw any consent given to Franchisee by which commingling is authorized.

9.7 Precautions Regarding the Collection of Hazardous Materials.

9.7.1 Contractual Prohibition Requirement. Franchisee shall include as a condition to its contractual agreement with its Customers a provision prohibiting disposal of Hazardous Waste in any of Franchisee's Collection Vehicles, Bins, or other equipment.

9.7.2 Load Check Program. Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, county, state and federal Hazardous Waste Regulations, shall be maintained for a minimum of five (5) years following the expiration of the Franchise, and shall be made available to the City Manager upon request. Further, prior to destroying or discarding any of such records, Franchisee shall notify City, and upon City's election, Franchisee shall deliver such records to City. Franchisee shall handle and dispose of any such Hazardous Materials in accordance with Applicable Laws.

9.8 Service Routes. Franchisee hereby acknowledges and agrees that the City Manager shall have the authority to set Solid Waste Handling Service routes, including but not limited to entry and exit points to and from Commercial Premises, and to direct Franchisee's Collection Vehicles to follow such routes, when necessary, in the City Manager's sole discretion, to reduce negative impacts on residential areas and City infrastructure.

9.9 Commercial Premises Recycling Services.

9.9.1 Franchisee shall promote, offer and provide a Recycling program for its Customers (the "Commercial Premises Recycling Program") that at a minimum meets the standards required under AB 341, and such program shall be consistent with any Ordinances adopted by the City to implement AB 341. Franchisee shall also assist the City in identifying Customers that are not in compliance with the Recycling requirements set forth in AB 341. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote Recycling services, determine if such Customer is receiving Recycling services from a third party in compliance with the requirements of AB 341, attempt to resolve any logistical detriments to providing Recycling services thereunder, and notify and request assistance from City for potential follow-up action where there is repeated refusal to implement the Commercial Premises Recycling Program. Concurrently with Franchisee's submittal of quarterly and Annual Reports, Franchisee shall submit a report to City that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to its Customers regarding AB 341 requirements, consideration of ordinances which may assist with gaining compliance with AB 341 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Premises Recycling Program. Franchisee shall be responsible for ensuring that its Commercial Premises Recycling Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements.

9.9.2 Franchisee shall provide commingled or Source Separated Recycling Collection services to all of its Customers. Franchisee shall Collect Recyclable Material from each

Customer at frequencies agreed upon with such Customer, but not less than once per week. As of the Effective Date, Customers shall be allowed to deposit, at a minimum, the following materials in Recycling Bins for Collection by Franchisee: paper (all types – anything that "tears"), cardboard, wooden pallets, beverage containers, plastics (including, without limitation, PET, HDPE,#3-7), plastic film, plastic bags, polystyrene packaging material, metals, and other Recyclable materials standard in the Recycling industry, as determined by the City Manager. Franchisee agrees to meet from time to time with City, as needed, and in good faith, to consider modifications to the above minimum list of Recyclable Material, and/or to address developments in processing technologies, emerging uses for various types of materials, changes in available markets, or other relevant issues.

9.9.3 On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Recycling services and programs. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Recycling services and programs to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Recycling services are available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by City, samples of materials provided to said Customers during the subject quarter.

9.10 Commercial Organics Program. Franchisee shall promote, offer and provide an Organics Collection program to all of its Customers (the "Commercial Organics Program"), to be approved by the City Manager, that at a minimum meets the requirements of AB 1826. Franchisee's Commercial Organics Program shall provide for the Collection of Organics separately from other Solid Waste, in Bins, bags, or by other methods approved in advance by the City Manager, and shall thereafter deliver or arrange for the on-going delivery of such Collected Organics to a Diversion facility approved by City. Franchisee shall also assist City in identifying Customers that are not in compliance with the requirements set forth in AB 1826. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote its Commercial Organics Program, determine if such Customer is receiving Organics services from a third party in compliance with the requirements of AB 1826, attempt to resolve any logistical detriments to providing services offered thereunder, and notify and request assistance from the City for potential follow up action where there is a repeated refusal to implement the Commercial Organics Program. Concurrently with Franchisee's submittal of its quarterly and Annual Reports, Franchisee shall submit a report that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to Customers regarding AB 1826 requirements, consideration of ordinances which may assist with gaining compliance with AB 1826 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to

implement the Commercial Organics Program. Franchisee shall be responsible for ensuring that its Commercial Organics Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements. Franchisee shall produce, keep current, and provide information specifically outlining its Commercial Organics Program, which shall specifically include the annual publication and distribution of a brochure describing this service to all applicable Customers in City. On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Commercial Organics program. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Commercial Organics program to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Commercial Organics program is available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by the City Manager, samples of materials provided to said Customers during the subject quarter.

9.11 Other Collection Programs As May Be Required by Law. In the event CalRecycle, or any federal or state law or regulation, imposes upon City or Franchisee a requirement for the implementation of any Source Separated program for the Collection of any type of discarded material (whether or not meeting the definition of Solid Waste hereunder) not already covered by this Agreement but applicable to Franchisee's Customers, Franchisee shall design and present a program to City to comply with such requirement, which program shall meet the City Manager's reasonable approval ("Proposed Program").

Franchisee shall present the Proposed Program within ninety (90) days of a request to do so by City. The Proposed Program shall include a detailed description of the following: (1) method of Collection; (2) equipment to be used; (3) materials to be Collected; and (4) proposed promotional and public education materials.

9.12 Guaranteed Minimum Franchisee Recycling Rate. Franchisee shall conduct its operations hereunder such that a minimum of fifty percent (50%) of all Solid Waste Collected from Franchisee's Customers (taking into account Diversion achieved by efforts other than its services) is Diverted from disposal at Landfills for each calendar year beginning January 1, 2018 ("Recycling Diversion Requirement"). For the purposes of this Section, Diversion includes only Recycling methods, Transformation (and/or other forms of converting Solid Waste into energy), and other processes which are accepted by the State toward meeting City's Diversion goal under AB 939. Franchisee shall not be entitled to a reduction in the Recycling Diversion Requirement, or a rate adjustment, if or when:

- Transformation or other facilities are no longer available for any reason;
- CalRecycle Diversion credit under AB 939 or other Applicable Laws is no longer provided for Solid Waste sent to a Transformation facility; or
- CalRecycle Diversion credit under AB 939, AB 1594, or other Applicable Laws

expires for Green Waste used as alternative daily Landfill cover.

At such time as City discovers that CalRecyle Diversion credit under AB 939 or other Applicable Law will no longer be provided for Solid Waste sent to a Transformation facility, City shall issue formal notice to Franchisee that any Solid Waste delivered to a Transformation facility from the date specified in City's notice through the end of that calendar year shall be subject to the 10% Franchise Fee, and shall not be eligible for Diversion credit. Notwithstanding anything in this Agreement to the contrary, Franchisee's Diversion requirements under this Agreement shall be subject to all Applicable Laws, such that if Diversion requirements in the State of California increase, Franchisee shall be required to comply with such increased Diversion requirement.

To comply with this Section, Franchisee is required to submit timely tonnage reports supporting the Recycling Diversion Requirement, and to provide supporting documentation as may be requested by City or its designee as part of, or independent of, an audit. Failure to meet, and fully support, the Recycling Diversion Requirement may result in termination of this Agreement pursuant to Section 15.

9.12.1 Implementation of Additional Diversion Services. In the event City does not meet the current Diversion goal of fifty percent (50%) imposed by AB 939, and City finds that Franchisee is not achieving the minimum fifty percent (50%) Diversion requirement pursuant to this Section 9.12, City may direct Franchisee to perform additional services (including the implementation of new Diversion programs) or modify the manner in which it performs existing services, and Franchisee agrees to do so.

9.13 Compliance and Penalties. City may provide Franchisee with written notice of violations of this Section. If Franchisee fails to cure any noticed violation within a reasonable period of time determined in City's sole discretion, the end date of which is stated in the written notice, the City may charge Franchisee up to Two Hundred Fifty Dollars ($250) per day for each violation identified in the written notice. Upon request, City may in its sole discretion, but is not required to, extend Franchisee's period to cure. The penalties in this Section are in addition to any penalties assessed pursuant to other provisions in this Agreement.

SECTION 10
REPORTING REQUIREMENTS

The Parties acknowledge that City will require reporting at various intervals by which information important to City can be compiled and analyzed. Throughout the Term the Parties agree to work together to address City's needs with respect to the information to be contained in reports prepared by Franchisee. The following is intended as a starting point in order to have established an objective baseline for reporting, but the frequency and content of the reports called out below may be changed by agreement of the Parties; provided any such change is approved by the City Manager in writing.

10.1 Annual Report. On or before the 45th day following January 1st of each year during the Term of this Agreement, Franchisee shall submit a written annual report and operations plan through completion and submittal of a form developed and approved by the

City Manager (each such report, an "Annual Report"). The Annual Report shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the information provided. The Annual Report shall include, but may not be limited to, information on the amount of Solid Waste Collected, disposed of, and Diverted, the methods utilized to Collect such Solid Waste, and identifying the disposal and non-disposal facilities to which the Franchisee delivered such Solid Waste. At a minimum, the Annual Report shall include all of the following:

10.1.1 Total Tonnage Collected and Diverted. A summary of the total tons of Solid Waste Collected in City in the preceding year as well as a summary of the total tonnage Diverted from the State's landfill systems during that time frame.

10.1.2 State-Mandated Compliance Reports. Information and State-Mandated Compliance Reports, in a form and content approved by the City Manager.

10.1.3 Yearly Comparison. In the second year and each subsequent year during the Term of the Agreement, Franchisee shall provide a year-by-year comparison, by weight, of Solid Waste disposal and Diversion.

10.1.4 Gross Receipts and Franchise Fee. Franchisee shall provide a total revenue statement, certified by the chief financial officer of Franchisee, setting forth the quarterly Franchise Fees paid and the basis for the calculation thereof, including specifically a breakdown of sources of revenue included in Gross Receipts and the amount of revenue derived from each such source comprising Gross Receipts.

10.1.5 Landfill and Processing Facilities. Franchisee shall provide the name and location of all Landfills, Processing Facilities, end users, and other disposal facilities used to dispose of material Collected from the City.

10.1.6 Customer/Bin Counts. Franchisee shall provide the number of Customers that received routine commercial service, the number of Customers that received Temporary Bin Service, and the Bin data required to be compiled and submitted by Franchisee pursuant to Section 9.3.3. In addition, Franchisee shall provide the number of Customers serviced in the City by processing type, including: Landfill Customers, MRF Customers, and Green Waste Composting Facility Customers. Also, Franchisee shall include the number of Source-Separated Recycling Customers.

10.1.7 Diversion Efforts. Franchisee shall describe Diversion efforts provided to Customers. Include staffing time, educational information provided, and other activities provided to help promote Recycling within commercial and industrial businesses.

10.1.8 Franchisee Recycling Plan. Franchisee shall provide an annual update to the Recycling Plan required by Section 10.3. In addition, Franchisee shall summarize each previous year's Recycling Plan.

10.1.9 Vehicle List. Franchisee shall provide an updated list of vehicles to be used to provide Solid Waste Handling Services in the City.

10.1.10 Processing Facility Listing. Franchisee shall provide an updated list of Processing Facilities to be used by Franchisee.

10.2 Quarterly Summary Reports. No later than forty five (45) days following each calendar quarter during the Term of this Agreement, Franchisee shall submit quarterly reports including the same information required by Section 10.1 under the headings: Tonnage, Diversion, and State-Mandated Compliance Reports; Gross Receipts and Franchise Fee; Landfill and Processing Facilities; Customer Counts; and Diversion Efforts.

The quarterly reports shall be submitted to the City Manager. Each quarterly report shall be accompanied by a statement, included at the bottom of such report, by the chief financial officer of Franchisee certifying to the accuracy of the report.

The Franchise shall maintain in its files for the Term of this Agreement, and at least three (3) years thereafter, tonnage receipts provided to Franchisee by each Landfill or Processing Facility used by Franchisee to dispose of waste Collected in the City. Franchisee shall provide such receipts for the audit financial analysis or upon request of City. This data will be used by City to verify Franchisee's quarterly reports. City may require, in its discretion, and Franchisee shall provide, additional information in connection with the quarterly reports, such as the number and types of businesses serviced, or other information City deems useful or appropriate.

10.3 Franchisee Recycling Plan.

10.3.1 Recycling Plan. Franchisee shall develop and submit a Recycling Plan which must be approved in writing by the City Manager before Franchisee commences Solid Waste Handling Services under this Agreement. Approval of the Recycling Plan shall be in the City Manager's sole discretion. Approval shall be based on the City Manager's review of the following Recycling Plan requirements. The City Manager may authorize, in writing, Franchisee to commence Solid Waste Handling Services while the Franchisee's Recycling Plan is under review. Should the City Manager subsequently reject Franchisee's Recycling Plan, Franchisee must immediately cease operations unless otherwise authorized, in writing, by the City Manager to continue services while Franchisee develops a new Recycling Plan. The Recycling Plan shall include the following:

(a) Statement of Overall Recycling Goals and Focus.

(b) Statement of Targeted Means to Increase Diversion Opportunities.

(c) Processing Facilities and Diversion information including:

- Processing Facilities to be used and their respective types.
- Estimated Solid Waste weight to be Collected by Franchisee within the City Limits in the current calendar year.
- Estimated Solid Waste Collected within the City Limits to be delivered by Franchisee and accepted by each Processing Facility in the current calendar year.

- How, if at all, Solid Waste will be processed between Collection and delivery to a Processing Facility.

- The Diversion rate of each Processing Facility.

(d) Marketing and Education Strategy information including:

- Franchisee staff and dedicated hours per week focused on Diversion.

- Information Franchisee intends to provide its Customers to encourage Diversion (e.g. brochures, guides, price incentives).

(e) Target Goals information including:

- Franchisee's Diversion Target Goals, in tonnage, by material type and Processing Facility.

- Franchisee's Customer Target Goals to increase the number of Customers that have Recycling, reuse, composting, or other Recycling services, including efforts to increase Source Reduction.

10.3.2 Annual Update. Franchisee shall submit on an annual basis an updated Recycling Plan as described in this Section 10.3. In addition, the annual Franchise Recycling Plan shall summarize each previous year.

10.4 Adverse Information. Franchisee shall provide City copies of all reports, pleadings, applications, notifications, communications, and documents, as well as copies of all decisions, correspondence, and actions, and other material adversely affecting this Agreement, or related in any manner to Franchisee's performance of this Agreement, submitted or received by Franchisee to or from the United States Environmental Protection Agency, CalRecycle, the California Regional Water Quality Control Board, and any other federal, state, regional, or local regulatory agency. Copies shall be submitted to City simultaneously with Franchisee's filing of such matters with said agencies. Franchisee's routine correspondence to said agencies need not be automatically submitted to City, but shall be made available to City upon written request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.5 Other Reporting Requirements. All reports and records required under this or any other Section of this Agreement shall be furnished at the sole expense of Franchisee. Franchisee agrees to submit such reports and information on computer discs or electronically in a format compatible with City's computer system as it may be upgraded from time to time, if requested by City. A copy of each of Franchisee's annual and other periodic public financial reports and those of each of its parent, subsidiary, and affiliated corporations and other entities, as City requests, shall be submitted to City within thirty (30) days after City giving

notice to Franchisee of such a request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.6 Failure to Report. The refusal, failure, or neglect of Franchisee to file any of the reports required by this Agreement within thirty (30) days such report is due, or the inclusion of any materially false or misleading statement or representation made knowingly by Franchisee in such report, shall be deemed a material breach of this Agreement, and shall subject Franchisee to all remedies, legal or equitable, which are available to City under this Agreement or otherwise. In the event City elects to suspend Franchisee's franchise rights for Franchisee's failure to file a report, as a condition to Franchisee's reinstatement, Franchisee shall be required to pay to City a penalty in the amount of Five Hundred Dollars ($500) for each thirty (30) day period in which the applicable report is delinquent.

10.7 Confidentiality. To the extent permitted by law, City shall endeavor to keep confidential any confidential information, such as Customer information or information regarding Franchisee's financial matters, that is submitted in connection with any reports required hereunder.

SECTION 11
AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION

11.1 Warranties and Representations.

(a) Franchisee warrants and represents that it is familiar with City's SRRE, it is familiar with City's waste stream, and it has the ability to and will provide sufficient programs and services to ensure City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, and all amendments thereto, with respect to the Customers it services hereunder.

(b) Without regard to any related indemnification requirements, Franchisee guarantees to City that it shall carry out its obligations under this Agreement so that (1) both it and City will at all times be in compliance with the requirements of all Applicable Laws, including specifically AB 939, AB 341, and AB 1826, and (2) City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, AB 341, and AB 1826, as well as the regulations implementing each of them and any and all amendments to each of them, with respect to the Customers Franchisee services hereunder. In meeting this obligation, Franchisee shall be mindful of and comply with all requirements of the County Agreement, including specifically, without limitation, the requirements thereof generally relating to (i) the delivery of Solid Waste only to transfer stations that provide quarterly certifications of Solid Waste delivered, and (ii) the disposal of residual Solid Waste that remains after Recycling processes have been completed. Commencing immediately upon the Effective Date, Franchisee shall implement all programs necessary to ensure City complies with all state-mandated programs relevant to the services provided hereunder and shall perform public education, awareness, and outreach activities as required by any state-mandated program or as reasonably required by the City Manager. Franchisee shall submit to the City Manager for review and approval all proposed written public

educational, awareness and outreach materials. Franchisee shall engage in any required education, awareness, and outreach activities within thirty (30) days of commencing services to any new Customers, and on not less than an annual basis with all existing Customers. Franchisee shall provide City with quarterly and annual written reports in a form acceptable to the City Manager and adequate to meet City's filing and reporting requirements with CalRecycle and the County of Orange, including any associated with AB 939, AB 341, and AB 1826 throughout the Term of this Agreement. At City's request, Franchisee shall be responsible to prepare, or assist City with the preparation of, all reports and other information as may be required by any agency, including specifically, the State of California, in order to comply with any Applicable Laws related to the services contemplated by this Agreement.

11.2 Mutual Cooperation. City and Franchisee shall reasonably cooperate in good faith with all efforts by each other to meet City's Diversion and other compliance requirements imposed by AB 939, AB 341, AB 1826, and other Applicable Laws. In this regard, City's obligations shall include, without limitation, making such petitions, requests and applications as may be reasonably requested by Franchisee for time extensions in meeting Diversion goals, reductions in Diversion goals, or other exceptions from the terms of AB 939, AB 341, AB 1826, and other Applicable Laws.

11.3 Performance Requirements. Franchisee's obligations pursuant to the provisions of this Section shall include, but not be limited to, the following terms:

11.3.1 Indemnification Requirements. Franchisee agrees to defend, with counsel approved by City, indemnify, and hold harmless the City Indemnitees from and against all fines and/or penalties and other liabilities which may be imposed by CalRecycle or any other regulatory agency if (1) Franchisee fails or refuses to timely provide information relating to its operations which is required pursuant to this Agreement or any Applicable Laws and such failure or refusal prevents or delays City from submitting reports required by Applicable Laws in a timely manner; or (2) the Source Reduction and Recycling goals, Diversion goals, program implementation requirements, or any other requirements of Applicable Laws are not met with respect to the Customers Franchisee services hereunder.

11.3.2 Assistance to City; Payment of Fees, Fines, and Penalties. In addition, Franchisee agrees, at its sole cost and expense, to:

(a) Assist City in responding to inquiries from CalRecycle;

(b) Assist City in preparing for, and participating in, CalRecycle's biennial review of City's compliance with Applicable Laws;

(c) Assist City in applying for an extension, if so directed by City;

(d) Assist City in any hearing conducted by CalRecycle relating to City's compliance with Applicable Laws;

(e) Assist City in the development and implementation of a public awareness and education program that is consistent with Applicable Laws, as well as any related requirements of Applicable Laws;

(f) Provide City with advice on Recycling, Source Reduction, and other technical assistance related to compliance with the Applicable Laws;

(g) Defend, with counsel acceptable to City, the City Indemnitees against the imposition of fines and/or penalties, or any other liabilities, issued by CalRecycle as a result of Franchisee's failure to comply with Applicable Laws, including, without limitation, AB 939, AB 341, and AB 1826; and

(h) Be responsible for and pay, any fees, penalties or other costs imposed against City by CalRecyle and Indemnify and hold harmless City against any fines, penalties, or other liabilities, levied against it for violation of any state-mandated Diversion requirements, or violation of any other provision of Applicable Laws; provided, however, Franchisee's obligation to indemnify City for any penalties or fines set forth in this sub-paragraph shall be in proportion to the amount of such fines or penalties imposed because of Franchisee's delay or failure to perform its obligations hereunder.

11.4 Annual Compliance Review. City intends to review Franchisee's performance annually at its expense to ensure compliance with the terms and provisions of this Agreement ("Annual Compliance Review"). At a minimum, City intends to have internal staff or outside consultants review Franchisee's performance to ensure ongoing compliance with the terms hereof, including, but not limited to, the payment of required fees, performance of the Solid Waste Handling Services stated herein, implementation of programs required under the Agreement, Franchisee's maintenance and upkeep of records, and Franchisee's compliance with all Applicable Laws. Franchisee shall provide any and all information reasonably requested by City in connection with its efforts to ensure compliance with the terms hereof, regardless of whether such information is specifically otherwise called out herein as an item that Franchisee is required to maintain and provide to City.

SECTION 12
FRANCHISEE'S BOOKS AND RECORDS; AUDITS

12.1 Examination of Records. Franchisee shall maintain all records relating to the Solid Waste Handling Services provided hereunder, including but not limited to Customer lists, billing records, accounts payable records, maps, service requests, cash receipts records, AB 939 compliance records, and other documents and materials which reasonably relate to Franchisee's compliance with and performance of the provisions of this Agreement (the "Records"), for the full Term of this Agreement, and an additional period thereafter of not less than three (3) years, or any longer period required by law. City shall have the right, upon five (5) business days advance notice, to inspect the Records. Such Records shall be made available to City at Franchisee's regular place of business, but in no event outside the County of Orange.

12.2 CERCLA Defense Records. City views the ability to defend against CERCLA and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for disposal, as well as where it was not taken, to be matters of concern. Franchisee shall maintain data retention and preservation systems which can establish where Solid Waste Collected in the City was

landfilled (and therefore establish where it was not landfilled) for not less than five (5) years following the termination of this Agreement, and agrees to notify City's Risk Manager, City Clerk and City Attorney before destroying such records thereafter. At any time, including after the expiration of the Term hereof, Franchisee shall provide copies of such records to City. The requirements of this Section shall survive the expiration of the Term of this Agreement.

12.3 Audits by City. City shall have the right to conduct or to contract with an independent auditing firm to perform an audit, at City's expense, of Franchisee's records (the "City Audit") to ensure compliance with the provisions of this Agreement on an annual and/or as-needed basis, to be determined by the City. The City Audit shall include, without limitation, a review of Franchisee's cash receipts records, Solid Waste tonnage Collection, Diversion, and other related records, as well as those of each of its parent, subsidiary and/or affiliated companies, as appropriate, to determine Franchisee's Gross Receipts, the accuracy of Franchise Fees paid, and such other information as is reasonably deemed appropriate by the City Manager to evaluate Franchisee's performance hereunder. As part of the City Audit Franchisee's Customer's accounts and related records may be subject to review. While Franchisee will not be required to submit detailed account records, such as the names and addresses of Customers, to the City in connection with required reports hereunder, Franchisee shall make such records and information available for review in connection with the City Audit at Franchisee's business offices.

Should any City Audit reveal an underpayment of any Franchise Fee required pursuant to this Agreement, the amount of such underpayment shall become due and payable to City not later than fifteen (15) days after written notice of such underpayment is sent to Franchisee by City, complete with any additional late charges as set forth herein. If a City Audit reveals inaccuracies or inconsistencies in more than five percent (5%) of all Customer accounts, either with Franchisee's operations or billing systems, or an underpayment of Franchise Fees of more than three percent (3%), Franchisee shall bear the entire cost of such City Audit and shall pay a sum necessary to cover such costs to the City within thirty (30) days of demand.

12.4 Inspection. City shall have the right to inspect Franchisee's books and records related to the Franchisee's performance under this Agreement. The inspections shall be allowed at any time during normal business hours, but City shall provide at least two (2) days advance written notice before City commences an inspection of Franchisee's books and records. Among other things, City shall be allowed to review Franchisee's contracts with its Customers, and shall be allowed to communicate directly with Franchisee's Customers, for the purpose of determining whether Franchisee is in compliance with this Agreement. City shall not reveal any trade secrets or proprietary information obtained during their review of Franchisee's books and records.

SECTION 13
RULES AND REGULATIONS OF CITY MANAGER

The City Manager shall have the power to establish rules and regulations respecting the accumulation, Collection and transportation of Solid Waste not inconsistent with the provisions of this Agreement, providing such rules and regulations are found to be reasonably necessary by the

City Manager for enforcement of the provisions of this Agreement, or any and all applicable laws and ordinances, and for the preservation of the public peace, health and safety. Franchisee agrees to comply with any and all such rules and regulations.

SECTION 14
INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE

14.1 Indemnification of City.

14.1.1 General Indemnification.

(a) Franchisee hereby agrees to and shall indemnify and hold harmless the City Indemnitees from and against any and all loss, liability, penalty, forfeiture, claim, demand, action, proceeding or suit in law or equity of any and every kind and description (including, but not limited to, injury to and death of any person and damage to property, or for contribution or indemnity claimed by third parties) arising out of, resulting from, and/or in any way connected with this Agreement including: (1) the negligence or willful misconduct of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement; (2) the failure of Franchisee, its officers, employees, agents, and/or subcontractors to comply in all respects with the provisions of this Agreement (including without limitation Franchisee's obligation to ensure City complies with the requirements of the County Agreement), all Applicable Laws (including, without limitation, the Environmental Laws), ordinances and regulations, and/or applicable permits and licenses; (3) the acts of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement for which strict liability is imposed by law (including, without limitation, the Environmental Laws); and (4) any challenge to the award of, or any provisions of this Agreement (including any claim that the application of any provision hereof violates any provision of the California Constitution). The foregoing indemnity and hold harmless provisions shall apply regardless of whether such loss, liability, penalty, forfeiture, claim, demand, action, proceeding, suit, injury, death or damage is also caused in part by any of City Indemnitees' negligence, but shall not extend to matters resulting from the City Indemnitees' sole negligence, or willful misconduct. Franchisee further agrees to and shall, upon demand of City, at Franchisee's sole cost and expense, defend (with attorneys acceptable to City) the City Indemnitees against any claims, actions, suits in law or equity or other proceedings, whether judicial, quasi-judicial or administrative in nature, arising or resulting from any of the aforementioned events, and to reimburse City for any and all costs and expenses City incurs in providing any such defense, either before, during or after the time Franchisee elects to provide such defense, including any and all costs incurred in overseeing any defense to be provided herein by Franchisee. Franchisee shall receive credit towards this indemnity obligation for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City

(b) Franchisee, upon demand of City, made by and through the City Attorney, shall protect City and appear in and defend the City Indemnitees in any claims or actions by third parties, whether judicial, administrative or otherwise, including, but not limited to disputes and litigation over the definitions of "Solid Waste" or "Recyclable Material," the scope of the rights granted herein, conflicts between the rights granted herein and rights asserted by other Persons, or the limits of City's authority with respect to the grant of licenses, or agreements,

exclusive or otherwise, asserting rights under the Dormant Commerce Clause or any other federal or state laws to provide Collection services in the City.

(c) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the expiration or earlier termination of this Agreement.

14.1.2 Hazardous Substances Indemnification.

(a) Without regard to any insurance coverage or requirements (but giving credit to Franchisee for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City), and without limiting the above general indemnification obligation in any way, Franchisee specifically agrees to and shall, to the maximum extent permitted by law, defend (with counsel acceptable to City) reimburse, indemnify, and hold the City Indemnitees harmless from and against any and all claims, actions, liabilities, damages, demands, judgments, losses, costs, liens, expenses, suits, actions, attorneys' fees, consultant fees, penalties and any and all other losses, damages, fees and expenses of whatever kind or nature ("Claims") (including but not limited to response costs, investigative costs, assessment costs, monitoring costs, treatment costs, cleanup costs, removal costs, remediation costs, and similar costs, damages and expenses) that arise out of or are alleged to arise out of or in any way relate to any action, inaction or omission of Franchisee that:

(i) results in any demand, claim, notice, order, or lawsuit, asserting that any of the Indemnitees is liable, responsible or in any way obligated to investigate, assess, monitor, study, test, treat, remove, remediate, or otherwise cleanup, any Hazardous Contaminant (as defined herein); or

(ii) relates to material Collected, transported, Recycled, treated or disposed of by Franchisee.

(b) Franchisee's obligations pursuant to this Section shall apply, without limitation, to:

(i) any Claims brought pursuant to or based on the provisions of CERCLA, RCRA, the California Hazardous Substances Account Act (California Health & Safety Code Sections 25300 et seq.), the California Hazardous Waste Control Laws (California Health and Safety Code Sections 25100 et seq.), the California Porter-Cologne Act (California Water Code Section 13000 et seq.), and any and all amendments and regulations thereto, and any other Federal, State, regional or local environmental statutory or regulatory provision;

(ii) any Claims based on or arising out of or alleged to be arising out of the ownership, use, lease, sale, design, construction, maintenance or operation by Franchisee of any facility;

(iii) any Claims based on or arising out of or alleged to be arising out of the marketing, sale, distribution, storage, transportation, disposal, processing or use of any materials recovered by Franchisee;

(iv) any Claims based on or arising out of or alleged to be arising out of any breach of any express or implied warranty, representation or covenant arising out of or in connection with this Agreement.

14.1.3 Additional Indemnification Requirements.

(a) The indemnity and defense obligations in this Section 14 shall apply irrespective of the negligence or willful misconduct of Franchisee or any affiliate of Franchisee.

(b) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the termination or expiration of this Agreement.

(c) With regard to any claim covered by this provision arising from the delivery of Solid Waste to the Orange County landfill system pursuant to the terms of the County Agreement, the indemnity provisions hereof are intended to be supplemental to any indemnification obligations owed to the City by the County of Orange pursuant to the County Agreement.

14.2 Surety. Contemporaneously with execution of this Agreement, as security for Franchisee's faithful performance of all obligations of this Agreement, Franchisee shall provide a surety mechanism (the "Surety") as more fully defined below in the amount of Ten Thousand Dollars ($10,000). The Surety may be comprised of either a performance bond or an irrevocable letter of credit, or a combination of both. If a letter of credit is utilized to satisfy some or all of the Surety requirements, it shall be drawn upon a financial institution with an office within fifty (50) miles of City, and otherwise in a form acceptable to the City Attorney. The performance bond, if any, shall be issued by a duly authorized corporate surety company authorized to do business in California, and in a form acceptable to the City Attorney. The cost of the Surety shall be the sole responsibility of Franchisee. The Surety shall be released within ninety (90) days after both (i) the expiration of the Term of this Agreement, and (ii) Franchisee's satisfactory performance of all obligations hereunder.

14.3 Forfeiture of Surety. In the event Franchisee shall for any reason become unable, or fail in any way, to perform as required by this Agreement, City may declare a portion or all of the Surety, as may be necessary to recompense and make whole the City, forfeited to the City. Upon partial or full forfeiture of the Surety, Franchisee shall restore the Surety to its original amount within thirty (30) days of the City's notice to do so. Failure to restore the Surety to its full amount within thirty (30) days shall be a material breach of this Agreement.

14.4 Use of Surety by City. Notwithstanding any provision hereof to the contrary, thirty (30) days following City providing Franchisee with written notice of its failure to pay City any amount owing under this Agreement, either the letter of credit or performance bond comprising the Surety may be utilized by City for purposes including, but not limited to: (1) payment of sums due under the terms of this Agreement which Franchisee has failed to timely pay to City, including specifically liquidated damages; and (2) reimbursement of costs borne by City to correct violations of this Agreement not corrected by Franchisee.

14.5 Replacement Letter of Credit. City may draw upon the entire letter of credit (if any) utilized to meet Franchisee's obligations pertaining to the Surety, and convert it to a cash deposit, if Franchisee fails to cause the letter of credit to be extended or replaced with another satisfactory letter of credit no later than sixty (60) days prior to its expiration.

14.6 Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement the following types of insurance and shall maintain the following minimum levels of coverage, which shall apply to any claims which may arise from or in connection with Franchisee's performance hereunder or the actions or inactions of any of Franchisee's officers, agents, representatives, employees, or subcontractors in connection with Franchisee's performance. The insurance requirements hereunder in no way limit Franchisee's various defense and indemnification obligations or any other obligations as set forth herein.

14.6.1 Comprehensive General Liability. Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01 including completed operations and contractual liability, with limits of liability of not less than Two Million Dollars ($2,000,000) per occurrence and Four Million Dollars ($4,000,000) annual aggregate for liability arising out of Franchisee's performance of this Agreement. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set forth above. If written with an aggregate, the aggregate shall be double the occurrence limit. Such insurance shall be endorsed to:

(a) Name the City of Irvine and its employees, representatives, officers, officials, agents, representatives, and volunteers (collectively hereinafter "City and City Personnel") as additional insured for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.2 Automobile Liability Insurance. Insurance with a limit of liability of not less than Two Million Dollars ($2,000,000) each occurrence and Two Million Dollars ($2,000,000) annual aggregate. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set above. Such insurance shall include coverage for all "owned," "hired" and "non-owned" vehicles, or coverage for "any auto." Such insurance shall be endorsed to:

(a) Name the City and City Personnel as additional insureds for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.3 Workers' Compensation Insurance.

(a) In accordance with the Labor Code of California and covering all employees of Franchisee providing any service in the performance of this agreement. Such insurance shall be endorsed to waive the insurer's right of subrogation against the City and City Personnel with respect to the performance of Franchisee's obligations under this Agreement.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement unless your insurance carrier is the State of California Insurance Fund (SCIF) and the endorsement numbers 2570 and 2065 are referenced on the certificate of insurance.

Franchisee's completion of the form attached hereto as Exhibit B shall be a condition precedent to Franchisee's rights under this Agreement. Should Franchisee certify, pursuant to Exhibit B, that, in the performance of the work under this Agreement, it shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, Franchisee shall nonetheless maintain responsibility for requiring that any subcontractors performing work under this Agreement have and maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the work performed under this Agreement.

14.6.4 Environmental Pollution Control Insurance. Franchisee shall maintain either an endorsement to its general liability policy, or a separate policy of insurance covering environmental pollution and contamination that names the City and City Personnel as an additional insured. Said coverage shall be in the amount of not less than One Million Dollars ($1,000,000) per occurrence, and Two Million Dollars ($2,000,000) in the aggregate, and shall substantially comply with all other provisions set forth in Section 14.6.1.

14.6.5 Endorsements. A statement on an insurance certificate will not be accepted in lieu of the actual endorsement. Insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to City for approval.

Additional Insured Endorsements shall not:

(1) Be limited to "Ongoing Operations"

(2) Exclude "Contractual Liability"

(3) Restrict coverage to the "Sole" liability of Franchisee

(4) Contain any other exclusion contrary to the Agreement.

Any Deductible and/or Self-Insured Retentions must be disclosed to City.

14.6.6 Acceptability of Insurers. Each policy shall be from a company with current A.M. Best's rating of A VII or higher and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus lines brokers under applicable

provisions of the California Insurance Code or any federal law. Any other rating must be approved in writing by the City.

14.6.7 Insurance of Subcontractors. Franchisee shall be responsible for causing subcontractors to maintain the same types and limits of coverage in compliance with this Agreement, including naming the City and City Personnel as additional insureds to the subcontractor's policies.

14.6.8 Verification of Coverage. Franchisee shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this Article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by or acceptable to City and are to be received and approved by City before work commences.

14.6.9 Loss or Reduction in Insurance. In the event that Franchisee fails to retain or maintain insurance with the scope and amounts of coverage required hereunder, City shall have the right, but not the obligation, to either terminate this Agreement, or obtain insurance coverage as required herein on behalf of Franchisee and utilize funds from the Surety defined in this Section 14 to pay the cost of providing such coverage.

SECTION 15
CITY'S REMEDIES; DEFAULT AND TERMINATION

15.1 City's Right to Suspend or Terminate. The City shall have the right to suspend or terminate this Agreement, and the nonexclusive franchise granted herein, upon Franchisee's breach of any of its obligations hereunder.

15.2 Notice of Default. If the City Manager determines that Franchisee has defaulted in the performance of any obligation hereunder, or that Franchisee's performance pursuant to this Agreement with respect to such matters has not been in conformity with reasonable industry standards which are obtained in similar cities in Southern California, the provisions of this Agreement, the requirements of the Municipal Code, the requirements of CalRecycle, including, but not limited to, requirements for Source Reduction and Recycling or any other applicable federal, state, or local law or regulation, including but not limited to the laws governing transfer, storage, or disposal of Special Wastes, or Hazardous Substances (to the extent applicable to Franchisee, and/or Franchisee's activities under this Agreement), the City Manager may provide written notice to Franchisee of such default. The City Manager may, in such written notice, set a reasonable time within which correction of such default shall be made. Unless a longer or shorter time is otherwise specified by the City Manager, a reasonable time for correction shall be thirty (30) days from the date such written notice is given.

15.3 Termination Without Right to Cure. City shall have the right of suspension or termination as a result of Franchisee's failure to timely cure any deficiency as set forth above, which right is in addition to City's right to terminate this Agreement without affording Franchisee an opportunity to cure in circumstances where Franchisee is determined to have

materially breached this Agreement. Notwithstanding anything to the contrary in Section 15.2 above, City shall thus be afforded the right to terminate this Agreement without affording the right to cure in the event of any material breach hereof by Franchisee, including without limitation any action, inaction or circumstance defined herein as a material breach, and/or under any of the following circumstances which are hereby defined as material breaches:

(a) If Franchisee practices, or attempts to practice, any fraud upon City.

(b) If Franchisee becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Franchisee in a bankruptcy proceeding.

(c) If Franchisee willfully violates any orders or rulings of any regulatory body other than City having jurisdiction over Franchisee relative to this Agreement. So long as City's rights are not prejudiced during the pendency of any challenge to such orders or rulings by Franchisee, Franchisee may contest any such orders or rulings by appropriate proceedings conducted in good faith, in which case no material breach of this Agreement shall be deemed to have occurred until a final ruling has been rendered.

(d) If Franchisee fails to meet the Diversion requirements of this Agreement or pursuant to Applicable Laws.

(e) If Franchisee fails to materially comply with any insurance or indemnification requirement set forth in this Agreement; provided, however, that Franchisee shall have a reasonable opportunity to cure any default relating to the Franchisee's failure to provide the City with proof of insurance, so long as such insurance is in effect at all times.

(f) If City is required to pay any fine or penalty, which Franchisee is required by the terms hereof to pay, yet which Franchisee fails, refuses, neglects or is unable to timely pay.

(g) If Franchisee, or any management level employee of Franchisee is convicted of a "Criminal Matter" (as defined herein). For purposes of this Section the term "Criminal Matter" refers to any felony or misdemeanor offense having any relationship to either Solid Waste Handling Services or public corruption (including, without limitation, bribery, conflict of interest related allegations, vote selling, or any similar type charges).

15.4 Termination Procedure. The following procedure shall apply to either of the following:

(a) any action or inaction by Franchisee which is a material breach of this Agreement, not requiring that Franchisee be afforded the right to cure, or

(b) any circumstance in which Franchisee fails to correct, to the satisfaction of the City Manager, all deficiencies contained in a written notice of default within the specified time (or if it is not reasonably possible to correct such deficiencies within the specified time, and Franchisee fails to commence to correct or remedy such deficiencies within the specified time and diligently effect such correction or remedy thereafter).

In the event of either of the above, then the City Manager shall either refer the matter to the City Council for review, or review the matter himself or herself and upon completion of such review notify Franchisee of the City Manager's decision, in writing.

15.4.2 City Manager Review. If the City Manager reviews the matter and determines that Franchisee has failed to properly or adequately perform as set forth above, the City Manager, in the exercise of his or her sole discretion, may terminate this Agreement, or take such other action as he or she deems appropriate to pursue any remedy available to City. A decision or order of the City Manager shall be final and binding on Franchisee unless Franchisee files a "Notice of Appeal" with the City Clerk within five (5) days of the date the notice of the City Manager's decision is given. The City Manager shall schedule any appeal for consideration by the City Council at the earliest feasible Council Meeting following the date a Notice of Appeal is given to City.

15.4.3 City Council Review. In the event an appeal of a decision of the City Manager is filed, or if the City Manager refers the matter directly to the City Council upon Franchisee's failure to cure a default, the City Council shall set the matter for consideration as a regular agenda item, and the matter shall not require a public hearing. In reviewing the matter the City Council may consider any information reported by the City Manager regarding the deficiencies, and shall give Franchisee, or its representatives and any other interested person, a reasonable opportunity to be heard. The Council shall determine, in the exercise of its absolute and sole discretion, whether Franchisee has failed to properly or adequately perform as set forth above, and if so whether to terminate the Agreement, or take such other action as it deems appropriate to pursue any remedy available to City. The decision of the City Council shall be final.

15.4.4 Performance During Reviews. Franchisee's performance under this Agreement is not excused, nor shall its rights to operate hereunder be impacted, during any period of time when its performance is under review as set forth above, including at any time prior to a final decision as to whether such performance is deficient.

15.5 Franchisee's Obligations Upon Termination. In the event this Agreement is terminated pursuant to this Section 15 or the Term of this Agreement expires:

(a) Franchisee shall have no right or authority to engage in Solid Waste Handling Services within the City Limits under this Agreement.

(b) Franchisee shall remain liable to City for any and all fees that would otherwise be payable by Franchisee, including specifically amounts resulting from the late payment of Franchise Fees.

(c) Franchisee shall allow its Customers to arrange for Solid Waste Handling Services with a Solid Waste enterprise collector authorized to perform such services, without penalty or liability for breach of contract.

(d) Franchisee shall remove all of its Bins used in performance of Solid Waste Handling Services hereunder from the Premises of all Customers, and shall properly dispose of all Solid Waste in such Bins, within such time period as specified by the City Manager. If Franchisee fails to remove its Bins and dispose of all Solid Waste in such Bins as required pursuant to this

Section 15.5 within the time periods prescribed, City shall have the right to take any of such actions that have not been performed by Franchisee. Franchisee shall promptly reimburse City for all sums expended by City in taking such actions, along with a ten percent (10%) administrative fee.

15.6 City's Remedies Cumulative. The rights and remedies of City set forth in any Section herein shall be in addition to any and all other rights and privileges City may have, and shall not be deemed to limit any such other rights or privileges of City under this Agreement or by virtue of any law.

SECTION 16
FRANCHISEE'S REMEDIES; ADMINISTRATIVE HEARING

16.1 Administrative Hearing. Should Franchisee contend that City is in breach of any aspect of this Agreement, it shall give notice to the City Manager requesting an administrative hearing on the allegation. The hearing shall occur as soon as reasonably possible, or on such date as mutually agreed by the parties, and shall be held before an impartial hearing officer to be determined by the City Manager. The hearing officer shall make an advisory ruling on Franchisee's allegations, and suggest a remedy if a breach by City is determined to exist. The hearing officer's ruling and recommendations shall become final and binding if the Parties so agree in writing within 30 days of the date notice of the decision is given to the Parties. Otherwise, the hearing officer's ruling shall have no further force or effect.

16.2 Other Remedies; Claims. Franchisee shall be entitled to all available remedies in law or equity for City's breach of this Agreement; provided, however, Franchisee shall not file or otherwise commence any action against City, in law or equity, in any court, until after an administrative hearing as set forth above has been completed, and the above noted thirty (30) day period to accept the hearing officer's decision has passed, or either City or Franchisee has given timely written notice to the other that it will not accept the hearing officer's decision.

16.3 Actions for Damages. As a prerequisite to the filing and maintenance of any action for damages by Franchisee against City arising out of or relating to this Agreement, Franchisee shall present a claim to City, as required by Government Code section 910 et seq., within thirty (30) days of the date of the occurrence giving rise to the claim for damages.

SECTION 17
ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS

This Agreement shall not be sold, hypothecated, sublet, assigned, or otherwise transferred, nor shall any of the rights or privileges herein be hypothecated, leased, assigned, sold, or otherwise transferred, either in whole or in part, nor shall title thereto, either legal or equitable, or any right, interest, or property therein, pass to or vest in any person, except Franchisee, either by action or inaction of Franchisee or by operation of law, without the prior written consent of City which may be withheld with or without cause. For purposes of permitting Franchisee to subcontract with other haulers to assist in providing services hereunder, and provided Franchisee will continue to provide services hereunder with its own employees, the written consent of the City Manager shall

suffice. Any other transfer, sale, subcontract, hypothecation, assignment or lease shall require the written consent of the City Council as expressed by a Resolution. Any attempt by Franchisee to hypothecate, subcontract, lease, assign, sell, or otherwise transfer any right or interest in this Agreement without the written consent of City shall be null and void and shall give rise to City's right, but not obligation, to terminate this Agreement.

SECTION 18
GENERAL PROVISIONS

18.1 Force Majeure. Franchisee shall not be in default under this Agreement in the event that its ability to provide Solid Waste Handling Services in compliance with its obligation to do so hereunder is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, civil disturbances, insurrections, explosion, natural disasters such as floods, earthquakes, landslides, and fires, strikes, lockouts, and other labor disturbances or other catastrophic events which are beyond the reasonable control of Franchisee. The phrase "other catastrophic events" does not include the financial inability of Franchisee to perform or the failure of Franchisee to obtain any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due in substantial part to the acts or omissions of Franchisee.

18.2 Property Damage. Any physical damage caused by the negligent or willful acts or omissions of employees, agents, or subcontractors of Franchisee to private or public property shall be promptly repaired or replaced.

18.3 City's Authorized Agent. Excepting amendments hereto and such actions set forth herein specifically calling for City Council action or approval, the City Manager is authorized to take any action with regard to any matter, or enforce any right, set forth herein requiring action by City.

18.4 Amendments. Except as otherwise expressly stated herein, no amendment of this Agreement shall be valid unless in writing duly executed by the Parties.

18.5 Independent Contractor. It is expressly understood and agreed that Franchisee shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Franchisee shall have the exclusive control over the details of the services and work performed hereunder and all persons performing the same; that Franchisee shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Franchisee. Neither Franchisee nor its officers, employees, agents or subcontractors shall obtain any rights to retirement benefits, workers' compensation benefits or any other benefits which accrue to City employees and Franchisee hereby expressly waives any claim it may have, or hereafter acquire, to such benefits.

18.6 Law to Govern; Venue. The laws of the State of California shall govern this Agreement. In the event of litigation between the parties, venue and jurisdiction shall lie exclusively in a state court of competent jurisdiction in Orange County, California. The

parties agree to waive any potential claim to diversity jurisdiction under Title 28 U.S.C. § 1332 or any other statute, law or judicial authority which actually or colorably provides for federal jurisdiction. In the event of any legal proceeding this Agreement shall be interpreted as if jointly drafted by the Parties.

18.7 Successors and Assigns. The terms, covenants and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties.

18.8 Waiver. The waiver by either Party of any breach or violation of any term, covenant or condition of this Agreement shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach or violation of the same or of any other term, covenant or condition.

18.9 Notices. All notices, or other communications whatsoever which this Agreement contemplates or requires either Party to give to the other, shall, except as otherwise provided herein, be in writing and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, addressed to the respective party as follows:

To City: City of Irvine
City Hall
1 Civic Center Plaza
Irvine, California 92714
Attn: City Manager

To Franchisee: _____
_____
_____
_____

or to such other address as either Party may from time to time designate by notice to the other given in accordance with this Section. Notice shall be deemed given on the date served if served personally between the hours of 8:00 a.m. to 5:00 p.m. on any regular business day for City's business offices. If mailed, notice shall be deemed given three (3) business days from the date such notice is deposited in the United States mail in the manner proscribed above.

18.10 Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected unless their enforcement under the circumstances would be unreasonable, inequitable or would otherwise frustrate the purposes of this Agreement.

18.11 Attorneys' Fees and Litigation Costs. In the event either party brings any action or proceeding to enforce or interpret the terms or provisions of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable attorneys' fees and other litigation costs and expenses, including without limitation expert witness fees, consultant fees and costs, without regard to whether the matter proceeds to trial.

Without limiting its scope in any way, this provision is expressly intended to, and shall, apply to fees and costs incurred in any appeal.

18.12 Corporate Resolution. Concurrent with the execution of this Agreement, Franchisee shall provide City with a corporate resolution of its Board of Directors demonstrating the authority for the undersigned to enter and lawfully bind Franchisee to this Agreement, or in the event Franchisee is not a Corporation, with such evidence of authority as required by the City Manager.

18.13 Integration. This Agreement contains the entire integrated agreement and understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, promises, proposals, and agreements between the Parties, whether written or oral. The Parties acknowledge this document has been executed with the consent and upon the advice of counsel. Each of the Parties acknowledges that no party or agent or attorney of any other party has made any promise, representation, or warranty, express or implied, not contained in this Agreement, to induce the other party to execute this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates indicated below.

CITY OF IRVINE
a California municipal corporation

APPROVED AS TO FORM:

_____
City Attorney

Date:_____ By: _____
City Manager

ATTEST:

Date:_____ By: _____
City Clerk

Franchisee _____

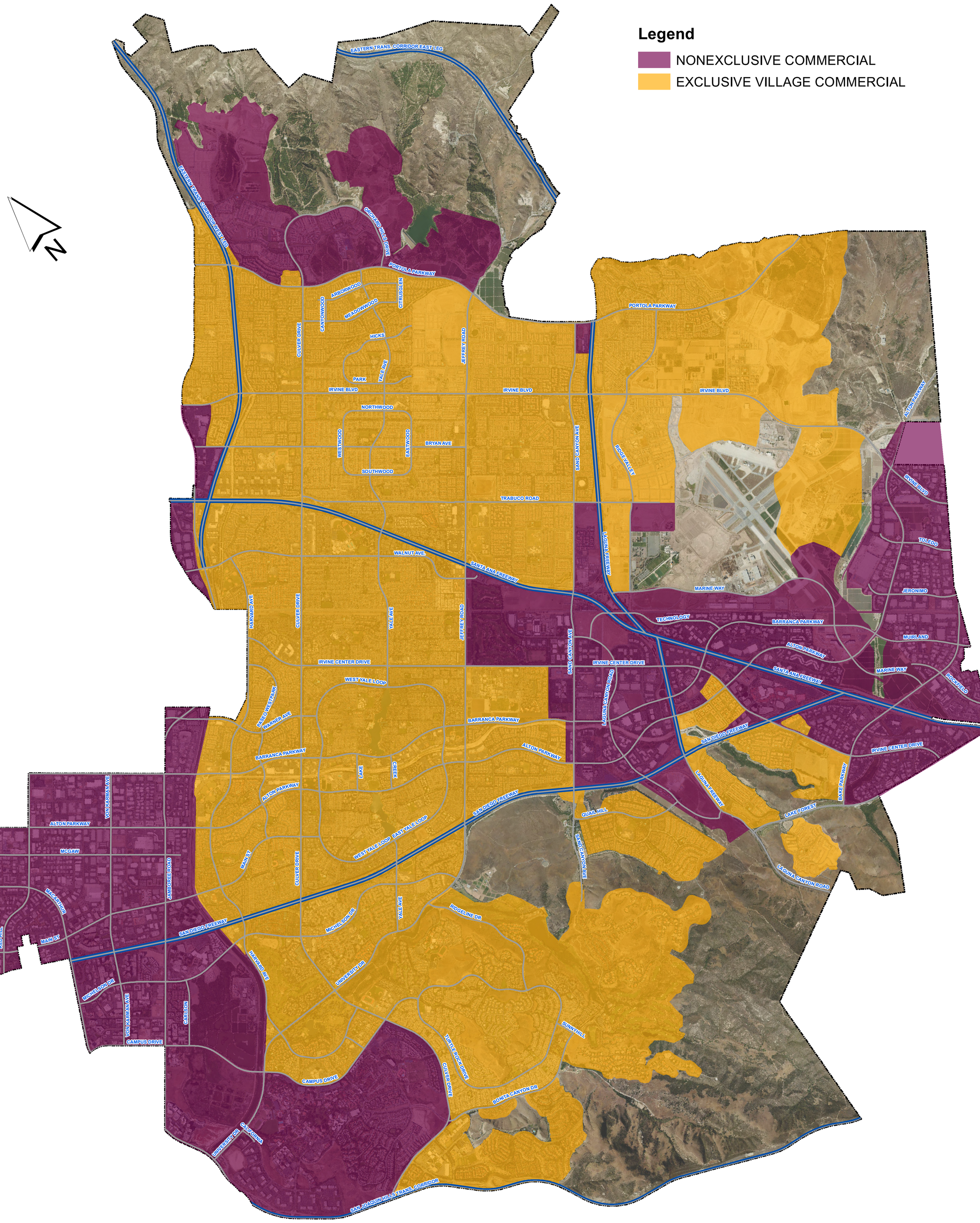
Date:_____ By: _____

Title: _____

EXHIBIT A

CITY OF IRVINE

COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

Date: 6/20/2017 Document Path: \\coi-file05\CommDev\B & S\GIS\projects\PublicWorks\Bridgeford_R_WasteMap_20170321_vn\WasteHaulers_20170620.mxd

EXHIBIT B

Workers' Compensation Insurance Certification

Contract Services Description:_____

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

(CHECK ONE APPLICABLE BOX BELOW)

☐ **I have and will maintain workers' compensation insurance**, as required by Section 3700 of the Labor Code, for the performance of the work to be performed under this Agreement and shall submit insurance certificates evidencing such coverage as set forth herein.

☐ I certify that, in the performance of the work under this Agreement, **I shall not employ any person** in any manner so as to become subject to the workers' compensation laws of California, and I hereby agree to indemnify, defend, and hold harmless the City of Irvine and all of its officials, employees, and agents from and against any and all claims, liabilities, and losses relating to personal injury or death, economic losses, and property damage arising out of my failure to provide such worker's compensation insurance. I further agree that, **if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions and immediately furnish insurance certificates** evidencing such coverage as set forth herein.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Dated:	
Contracting Firm:	
Signature:	
Title:	
Address:	

NONEXCLUSIVE FRANCHISE AGREEMENT FOR COMMERCIAL SOLID WASTE COLLECTION

DRAFT

BETWEEN THE CITY OF IRVINE AND

_____

EFFECTIVE DATE:

_____

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NONEXCLUSIVE FRANCHISE AGREEMENT

This Nonexclusive Franchise Agreement ("Agreement") is entered into and effective as of _____, __, ____2017, by and between the CITY OF IRVINE, a California municipal corporation ~~organized under the laws of the State of California~~ ("City") and _____ ("Franchisee")~~ (collectively, the "Parties")~~, relating to the provision of certain Solid Waste Handling Services within the City which are not subject to City's Exclusive Franchise Agreement. City and Franchisee are referred to herein collectively as the "Parties" and individually as a "Party."

RECITALS

A. The Legislature of the State of California, by enactment of ~~AB 939, established a solid waste management process that~~the California Integrated Waste Management Act of 1989 ("AB 939"), has declared that it is in the public interest to authorize and require local agencies to make adequate provision for the disposal of all Solid Waste within their jurisdictions. AB 939 requires, among other things, ~~requires every city to divert at least 50% of its waste (compared to 1990 levels) from landfills~~ that every local agency Divert at least fifty percent (50%) of its Solid Waste from Landfills by the year 2000 or face possible fines of up to Ten Thousand Dollars ($10,000~~-~~) per day.

B. City previously entered several nonexclusive franchise agreements with various franchisees, approved by City's City Council on November 27, 2007 (the "Prior Agreement").

C. The Prior Agreement expires on December 31, 2017, and the Parties enter this Agreement with the intent of restating and amending the Prior Agreement to: (i) reflect service standards and legal requirements in the Solid Waste industry which have changed over time, (ii) document agreed upon changes to the scope of the nonexclusive franchise granted in the Prior Agreement, and (iii) memorialize that this Agreement shall supersede the Prior Agreement, except with respect to certain continuing obligations as more specifically set forth herein.

D. It is the intent of the Parties that Franchisee, and not City, shall be solely responsible for establishing and collecting all charges for Solid Waste Handling Services provided by Franchisee pursuant to this Agreement.

E. City and Franchisee are mindful of the provisions of the laws governing the safe Collection, transport, Recycling, and disposal of Solid Waste, including AB 939, AB 341, AB 1594, AB 1826, RCRA, and CERCLA. City and Franchisee desire to leave no doubts as to their respective roles, and to memorialize that by entering into this Agreement City is not thereby becoming an "arranger" or a "generator" as those terms are used in CERCLA, and that it is Franchisee, not City, who is "arranging for" the Collection, transport for disposal, composting, and Recycling of municipal Solid Waste in the City which may contain Hazardous Substances. City and Franchisee understand and agree that it is Franchisee, and not City, who will arrange to collect Solid Waste, that City has not, and, by this Agreement does not, instruct Franchisee on its Collection methods, nor supervise the Collection process, nor do the Parties intend to place title to such Solid Waste in City, but rather intend that whatever, if any, title in and to such Solid Waste that otherwise might exist in or with City in the absence of this Agreement is hereby transferred to

Franchisee, and further that if Franchisee gains title to such Solid Waste it is by operation of law and agreement with its Customers and is not the result of this Agreement. By entering this Agreement, City and Franchisee further desire to confirm that Franchisee has agreed to indemnify City in connection with any claims relating to the inadvertent or intentional collection, transportation and/or disposal by Franchisee of Hazardous Contaminants that may occur in connection with Franchisee's performance under this Agreement in accordance with the terms and conditions set forth herein.

~~B~~F. To comply with the ~~diversion~~ Diversion requirements of AB 939 and ~~to advance the City's previously adopted Zero Waste goals~~support "Zero Waste" principles, as adopted by the City Council on July 10, 2007, pursuant to Irvine City Council Resolution No. 07-95, while at the same time fostering competition, ~~the~~ City deems it necessary to implement a program, as reflected by this Agreement, to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and ~~recycling~~Recycling.

~~C~~G. By entering into this Agreement, Franchisee agrees to provide such ~~services~~ Services as are necessary to ensure City complies with ~~AB 939~~the requirements of all Applicable Laws including specifically, without limitation, AB 939, AB 341, AB 1826, and Public Resources Code Section 40000, et seq., in connection with the Solid Waste Handling Services it provides hereunder, and represents and warrants that it has the experience and qualifications to conduct the services detailed herein.

~~D~~H. ~~City's~~ The City Council hereby determines and finds that the public interest, health, safety and ~~well being~~ wellbeing will be served by entering this Agreement.

COVENANTS

Based upon the foregoing Recitals and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1
RECITALS

The Parties acknowledge the above Recitals are true and correct and incorporate them herein as if they were fully restated.

SECTION 2
DEFINITIONS

Whenever any term used in this Agreement has been defined by ~~Division 30, Part 1, Chapter 2 of~~ the California Public Resources Code~~, or Title 6, Division 7, of the City of Irvine~~ or the Municipal Code, the definition of such term set forth therein shall apply unless the term is otherwise defined in this Agreement~~. The~~; and, terms defined ~~herein~~ in this Agreement shall have ~~the~~ such meaning ~~set forth in~~ as defined in this Agreement for purposes of this Agreement. Otherwise, ~~the~~ terms ~~herein~~ used in this Agreement shall have their ordinary meaning.

2.1 AB 341. "AB 341" shall mean Assembly Bill 341 from the 2011-2012 Regular Session of the California Legislature (Chapter 476, Statutes 2011), relating to mandatory commercial Recycling.

2.2 ~~2.1~~AB 939. "AB 939" shall mean the California Integrated Waste Management Act of 1989, currently codified as California Public Resources Code Section 40000 et seq., as it may be amended from time to time.

~~Applicable Law. "2.2Applicable Law" shall mean any existing or future law, rule, regulation, requirement, guideline, permit, action, determination, or order of any Court, governmental body, or agency thereof, which is in any way applicable to any services, transactions, or other matters set forth in or contemplated by this Agreement, as such may be amended from time to time.~~

2.3 AB 1594. "AB 1594" shall mean Assembly Bill 1594 from the 2013-2014 Regular Session of the California Legislature (Chapter 719, Statutes 2014), relating to the ban on the use of Green Waste as alternative daily cover at landfills.

2.4 AB 1826. "AB 1826" shall mean Assembly Bill 1826 from the 2013-2014 Regular Session of the California Legislature (Chapter 727, Statutes 2014).

2.5 Animal Waste. "Animal Waste" shall mean animal carcasses, dead animals, and/or parts or portions of dead animals. Animal Waste shall not include manure.

2.6 Annual Report. "Annual Report" shall have the meaning ascribed in Section 10.1 of this Agreement.

2.7 Applicable Laws. "Applicable Laws" shall mean all federal, state, county, and local laws, regulations, rules, orders, judgments, decrees, permits, approvals, or other requirements of any governmental agency having jurisdiction over an aspect of this Agreement that are in force on the Effective Date, and as may be enacted, issued or amended thereafter, including without limitation City's Municipal Code, AB 341, AB 939, AB 1594, AB 1826, CERCLA, and RCRA.

2.8 ~~2.3~~Bins. "Bins" shall mean dumpsters, three yard bins, Recycling Bins, 10, 36 and 40 yard Roll-Off Boxes, commercial compactors, 10 yard lowboy containers, and any similar such devices, regardless of size or capacity, provided by Franchisee to any Customer for use in Solid Waste Handling Services.

~~2.4 Board. The "Board" shall mean the California Integrated Waste Management Board.~~

~~City's Exclusive Franchise Agreement. "2.5 City's Exclusive Franchise Agreement" shall mean that certain agreement with Waste Management Collection and Recycling, Inc., dba Waste Management of Orange County, effective as of July 1, 1997, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential and Village Commercial Premises in the City.~~

~~City's Exclusive Franchisee. "City's Exclusive Franchisee" shall mean Waste Management of Orange County, a division of Waste Management Collection and Recycling, Inc., the franchisee set forth in 2.6 City's Exclusive Franchise Agreement~~

2.9 CalRecycle. "CalRecycle" shall mean the State of California Department of Resources Recycling and Recovery, the department within the State Natural Resources Agency responsible for the administration of the Integrated Waste Management Act of 1989, California Public Resources Code Section 40000 et seq.("Act"), or any successor department or agency created or designated for such purpose pursuant to the Act.

2.10 CDI Processing Facility. "CDI Processing Facility" shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of Recycling or reuse.

2.11 CERCLA. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC §9601 et seq.).

2.12 City. "City" shall mean the City of Irvine, a municipal corporation, located in Orange County, California.

2.13 City Council. "City Council" shall mean the City Council of the City of Irvine.

2.14 City Indemnitees. "City Indemnitees" shall mean the City and its past and present elected and appointed officials, officers, commissions, boards, members, employees, representatives, agents, consultants, and volunteers.

2.15 ~~2.7~~City Limits. "City Limits" shall mean the territorial boundaries of the City together with all amendments and changes thereto, which boundaries are depicted on maps, incorporated herein by reference, that are kept on file in the office of the City Clerk of the City of Irvine, and which are from time to time amended to reflect changes.

2.16 ~~2.8~~City Manager. "City Manager" shall mean the City Manager of the City of Irvine or his or her designee.

2.17 Collect/Collection. "Collect" or "Collection" shall mean to take physical possession of, transport, and remove (i) Solid Waste from a Premises, or (ii) any other materials that do not otherwise constitute Solid Waste, but that are discarded by a Customer pursuant to this Agreement.

2.18 Collection Vehicles. "Collection Vehicles" shall mean vehicles used by Franchisee in the performance of Solid Waste Handling Services.

2.19 Commercial Premises. "Commercial Premises" shall mean property upon which a business activity is conducted, including but not limited to retail sales, services, manufacturing, assembling, storage, or wholesale operations, but excluding businesses conducted upon residential premises that are permitted under applicable zoning regulations and that do not constitute the primary use of the property. Commercial Premises include

hotels, motels, assisted living facilities, convalescent centers, nursing homes, and institutional premises, including, without limitation, churches and private schools.

2.20 ~~2.9~~Construction and Demolition (C&D) Debris. "Construction and Demolition Debris" or "C&D Debris" shall mean Solid Waste generated, produced, or discarded in connection with construction, demolition, landscaping, land clearing, or general clean-up activities within the City, including, but not limited to, concrete, plaster, drywall, ~~green waste~~Green Waste, wood, wood scraps, metals, dirt, rock and rubble, without regard to whether such materials are ~~recycled~~Recycled.

~~2.10Construction and Demolition/Inert Debris (CDI) Processing Facility. "CDI Processing Facility" shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of recycling or reuse.~~

2.21 ~~2.11~~County Agreement. "County Agreement" shall mean that certain ~~waste disposal agreement entered between~~ Waste Disposal Agreement, as the same may be amended from time to time, entered into among various Orange County cities, including specifically the City of Irvine, and the County of Orange relating to the use of ~~the County's~~ County landfills for the disposal of Solid Waste ~~collected~~ Collected in such cities, ~~as the same may be amended from time to time~~and which is on file in the office of the Clerk of the City of Irvine.

2.22 ~~2.12~~Customer. "Customer" shall mean any person or entity receiving Solid Waste Handling Services, including ~~recycling~~ Recycling services, from Franchisee pursuant to this Agreement.

2.23 Diversion. "Diversion" or "Divert" shall mean the diversion of Solid Waste, in accordance with all applicable federal, state and local requirements, from disposal at Solid Waste Landfills or transformation facilities through Recycling, reuse, or composting.

2.24 ~~2.13~~Division 7. "Division 7" shall mean Title 6, Division 7 of City's Municipal Code, pertaining to Solid Waste, as it may be amended or recodified from time to time.

2.25 ~~2.14~~Dwelling Unit. "Dwelling Unit" shall have the meaning set forth in City Zoning Code Section 1-2-1, as of the Effective Date.

2.26 ~~2.15~~Effective Date. "Effective Date" shall mean ~~_____, __, ____.~~October 26, 2017.

2.27 Environmental Laws. "Environmental Laws" shall mean all federal and state statutes, county, local and City ordinances concerning public health, safety and the environment including, by way of example and not limitation, CERCLA; RCRA; the Federal Clean Water Act, 33 USC §1251 et seq.; the Federal Clean Air Act, 42 USC §7401 et seq.; the Toxic Substances Control Act, 15 USC §2601 et seq.; the Occupational Safety and Health Act, 29 USC §651 et seq.; the California Hazardous Waste Control Act, California Health and Safety Code §25100 et seq.; the Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health and Safety Code §25300 et seq.; the Porter-Cologne Water Quality

Control Act, California Water Code §13000 et seq.; the Safe Drinking Water and Toxic Enforcement Act, California Health and Safety Code §25249.5 et seq.; as currently in force or as hereafter amended, and all rules and regulations promulgated thereunder.

2.28 Exclusive Franchise Agreement. "Exclusive Franchise Agreement" shall mean that certain agreement with Waste Management Collection & Recycling, Inc., a California corporation, dba Waste Management of Orange County ("Waste Management"), or its permitted successor or assignee, effective as of September 1, 2016, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential Premises and Village Commercial Premises in the City, and all Premises and facilities owned and/or operated by City or, if such agreement is terminated prior to the end of the term thereof, an agreement entered into with another hauler on substantially similar terms as are set forth in the above-described agreement with Waste Management.

2.29 Exclusive Franchisee. "Exclusive Franchisee" shall mean the franchisee set forth in the Exclusive Franchise Agreement.

2.30 ~~2.16~~Exclusive Franchise Premises. "Exclusive Franchise Premises" shall mean ~~all~~ those Premises subject to the ~~City's~~ Exclusive Franchise Agreement, ~~including~~ and specifically all Residential Premises, all Village Commercial Premises (which term is defined to include all Mixed-Use ~~Development, and Village Commercial Premises.~~Developments), and all Premises owned and/or operated by City.

2.31 Food Waste. "Food Waste" shall mean compostable Organic materials, excluding Green Waste, including but not limited to: (i) all food (including fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells); (ii) food-soiled compostable paper (including napkins, paper towels, paper plates); and (iii) tea bags, coffee grounds and filters.

2.32 Franchisee. "Franchisee" shall mean the entity identified as the "Franchisee" in the preamble to this Agreement, or any entity pursuant to the terms hereof permitted to become the successor or assignee thereof.

2.33 ~~2.17~~Franchise Fee. "Franchise Fee" shall mean the franchise fee set forth herein and more fully defined in Section ~~5, including specifically Section 5.1 and 5.4, hereof~~7.

2.34 ~~2.18~~Generator. "Generator" shall mean any person or entity that generates, produces, or discards Solid Waste, including Recyclable Material.

2.35 ~~2.19~~Green ~~Material~~Waste. "Green ~~Material~~Waste" shall mean any plant material that is kept separate from other Solid Waste at the point of generation and contains no greater than one percent (1%) of physical contaminants by weight. Green ~~material~~ Waste includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and ~~construction and demolition~~ C&D Debris wood waste. Green ~~material~~ Waste does not include food ~~material~~, food materials, biosolids, plant material mixed with Solid Waste, material processed from commingled waste, wood containing lead-based paint or wood preservative, or mixed ~~construction or demolition debris~~C&D Debris.

2.36 ~~2.20~~Green ~~Material~~ Waste Composting Facility. "Green ~~Material~~ Waste Composting Facility" shall mean a Processing Facility that receives and processes Green ~~Material~~ Waste for the purposes of recycling or reuse. A Green ~~Material~~ Waste Composting Facility may also handle manure and paper products~~,~~. A Processing Facility that handles feedstock that is not a Green ~~Material~~Waste, manure, or a paper product shall not be considered a Green ~~Material~~ Waste Composting Facility.

2.37 ~~2.21~~Gross Receipts. "Gross Receipts" shall mean and include all monies, fees, charges, consideration, and revenue received by, or imputed to Franchisee and any affiliates, parent companies, subsidiaries and/or subcontractors of Franchisee, in connection with, arising from, or in any way attributable to the services carried out by or on behalf of Franchisee pursuant to this Agreement. Gross Receipts includes, without limitation, any amounts ~~collected~~ Collected by Franchisee from its Customers which reflects Tipping Fees or other costs incurred by Franchisee to provide services pursuant to this Agreement. As qualified exceptions to the above definition, and except as otherwise note below, Gross Receipts shall not include:

(a) ~~(i)~~Amounts ~~collected~~ Collected by Franchisee from its Customers which reflect that portion (if any) of the Franchise Fees imposed upon Franchisee by City ~~.~~which Franchisee may choose to pass on to its Customers; provided, however, any such amounts which exceed a Customer's pro-rata share of the Franchise Fee actually imposed upon Franchisee by City shall not be exempted from the definition of Gross Receipts.

(b) ~~(ii)~~Revenue from the resale of Recyclable Materials.

~~2.22Hazardous Waste. "Hazardous Waste" shall mean (i) all waste defined or characterized as hazardous waste by the federal Solid Waste Disposal Act (42 U.S.C. § 3251 et seq.), as amended, including the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901 et seq.) and all future amendments thereto, or regulations promulgated thereunder and (ii) all waste defined or characterized as hazardous waste by the principal agencies of the State of California (including without limitation the Department of Health Services and the California Integrated Waste Management Board) having jurisdiction over hazardous waste generated by facilities within such state, provided that the term "Hazardous Waste": (1) Is intended to mean and include those substances which are not normally expected to be disposed of by generally accepted sanitary landfill disposal methods; (2) Shall include radioactive wastes; and (3) Shall be construed to have the broader, more encompassing definition where there exists a conflict in the definitions employed by two or more governmental agencies having concurrent or overlapping jurisdiction over hazardous waste.~~

2.38 Hazardous Contaminant. "Hazardous Contaminant" shall mean any "hazardous material," as that term is defined under California Health & Safety Code Section 25501(n); any "hazardous substance," as that term is defined herein or under California Health & Safety Code Sections 25281(h), 25501(n), and under Title 42, Section 9601(14) of the United States Code; any "hazardous waste," as that term is defined herein and under Title 42, Section 6903(5) of the United States Code and under California Health & Safety Code Section 25501(n); any chemical which the Governor has identified as a chemical known to the State

to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term "Hazardous Contaminant" shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.

2.39 Hazardous Substance. "Hazardous Substance" shall mean any of the following: (a) any substances defined, regulated or listed (directly or by reference) as "Hazardous Substances," "hazardous materials," "Hazardous Wastes," "toxic waste," or "toxic substances" or similarly identified as hazardous to human health or the environment, in or pursuant to (i) CERCLA; (ii) the Hazardous Materials Transportation Act, 49 USC §5101, et seq.; (iii) RCRA; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7401 et seq.; and (vii) the California Water Code §13050; (b) any substances identified in any and all amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified and/or regulated as hazardous or toxic under any other applicable federal, state or local laws or regulations, including any of the Environmental Laws, currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl's ("PCBs"), petroleum, natural gas and synthetic fuel products, and by-products.

2.40 Hazardous Waste. "Hazardous Waste" shall mean all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code §25110.02, §25115, and §25117 or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to RCRA, all future amendments thereto, and all rules and regulations promulgated thereunder.

2.41 HHWE. "HHWE" shall mean City's Household Hazardous Waste~~, "2.23 Household Hazardous Waste" shall mean Hazardous Waste produced at Residential Premises.~~ Element approved by the State of California pursuant to the requirements of AB 939.

2.42 ~~2.24~~Inert Debris. "Inert Debris" shall mean ~~.~~Solid Waste that is Source-Separated or separated for reuse; does not contain Hazardous Waste~~—~~, Hazardous Contaminants, Hazardous Substances, or soluble pollutants at concentrations in excess of water quality objectives set by applicable Federal, State, and local authorities, including the City; and does not contain significant quantities of decomposable waste. Inert ~~debris~~ Debris may not contain more than 1% putrescible waste by volume calculated on a monthly basis, and the putrescible wastes shall not constitute a nuisance, as determined by the City Manager.

2.42.1 ~~2.24.1~~Type A Inert Debris. "Type A Inert Debris" shall mean C&D Debris, including but not limited to concrete, fully cured asphalt, glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products, that meets the definition of "Inert Debris."

2.43 ~~2.25~~Landfill. "Landfill" shall mean a ~~solid waste~~ Solid Waste landfill as defined by Public Resources Code Section 40195~~,~~.1 for which a current Solid Waste ~~Facilities Permit~~ facilities permit has been issued by ~~the local enforcement agency and/or with, if required, Board approval~~ CalRecycle or which is currently permitted under the regulatory scheme of another state.

2.44 ~~2.26~~Material Recovery Facility (MRF). ~~A~~ "Material Recovery Facility (MRF)" shall mean a Processing Facility permitted by the State of California where Solid Waste and/or Recyclable Materials are sorted or separated, by hand or by use of machinery, for the purpose of ~~recycling~~Recycling, reuse, and/or composting, and which can reasonably demonstrate through documentation an average annual ~~waste diversion~~ Diversion rate of at least fifty percent (50%~~.~~).

2.45 Medical Waste. "Medical Waste" shall mean waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including, without limitation, blood-soaked bandages, culture dishes and other glassware, discarded surgical gloves, discarded surgical instruments, discarded needles used to give shots or draw blood (e.g., medical sharps), cultures, stocks, swabs used to inoculate cultures, removed body organs (e.g., tonsils, appendices, limbs), and discarded lancets.

2.46 Mixed-Use Development. "Mixed-Use Development~~," as the term is used in this Agreement,~~ " shall mean Premises where Bins are shared by ~~both commercial and residential tenants. For purposes of this Agreement, all~~ Customers from both Commercial Premises and Multi-Family Dwellings. Mixed-Use Developments ~~within the City Limits are Residential Premises and thereby Exclusive Franchise Premises.~~shall be deemed to be Village Commercial Premises for purposes of this Agreement. The term Mixed-Use Development has been defined for purposes of this Agreement, and is specifically intended to have a different definition and meaning than the term "Mixed-use development" as set forth and defined in City's Municipal Code.

2.47 Multi-Family Dwelling. "Multi-Family Dwelling" shall mean any building or lot containing more than one Dwelling Unit and at which the Dwelling Units receive Solid Waste Handling Services through the use of shared Bins pursuant to the terms of the Exclusive Franchise Agreement.

2.48 Municipal Code. "Municipal Code" shall mean City's Municipal Code of Ordinances, including City's Zoning Code, and all uncodified ordinances duly adopted by City, as such may be amended from time to time.

2.49 NPDES. "NPDES" shall mean the National Pollutant Discharge Elimination System, a permit program established by the 1987 Water Quality Act to control non-point source pollution.

2.50 Organics. "Organics" shall mean Food Waste and Green Waste.

~~New Commercial Development. "2.28 New Commercial Development" shall mean all commercial development, excluding Premises now or later designated as Village Commercial Premises and Mixed-Use Development, within the City Limits.~~

~~2.29 Nonexclusive Franchise Premises. "Nonexclusive Franchise Premises" shall mean all Premises within the City Limits other than Exclusive Franchise Premises. Nonexclusive Franchise Premises shall include New Commercial Development, as that term is defined In Section 2.28.~~

2.51 ~~2.30~~Premises. "Premises" shall mean any land, building and/or structure, or portion thereof, in the City where Solid Waste ~~or Household Hazardous Waste~~ is produced, generated or accumulated.

2.52 ~~2.31~~Processing Facility. "Processing Facility" shall mean a facility approved pursuant to Section ~~3.5~~ 3.6 of this Agreement that receives or processes Solid Waste, including but not limited to ~~Material Recovery Facilities~~MRF's.

2.53 RCRA. "RCRA" shall mean the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. § 9601 et seq.).

2.54 Recycle or Recycling. "Recycle" or "Recycling" shall mean the process of Collecting, sorting, cleaning, treating and/or reconstituting materials that would otherwise be disposed of and returning these materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products.

2.55 ~~2.32~~Recyclable Material (Recyclables). "Recyclable Material" or "Recyclables" shall mean ~~any product salvaged or collected for the purpose of reprocessing, remanufacturing, resale or reuse, including, but not limited to, paper, plastic, glass, cardboard, aluminum materials, inert material, and newsprint~~that Solid Waste discarded within Premises that are subject to this Agreement and which is capable of being Recycled.

2.56 ~~2.33~~Residential Premises. "Residential Premises" shall mean all ~~Dwelling Units, excluding hotels and/or Single Room Occupancy Hotels (i.e., temporary housing facilities for transients, otherwise known as SRO's.) Residential Premises shall include, but not be limited to, all Mixed-Use Development~~Premises upon which Dwelling Units exist.

~~Solid Waste. "2.34Solid Waste" shall mean and include all solid waste, including Recyclable Material, as defined by Division 7.~~

2.57 Solid Waste. "Solid Waste" shall mean and include all discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction waste, industrial waste, commercial Solid Waste, bulky items, and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of "Nonhazardous Solid Waste" set forth in the California Code of Regulations, as it may be amended from time to time. Solid Waste does not include Hazardous Contaminants, Hazardous Substances, Hazardous Waste, low-level radioactive waste, untreated Medical Waste, or Special Wastes.

2.58 ~~2.35~~Solid Waste Handling Services~~.~~ . "Solid Waste Handling Services" shall mean the ~~collection, transportation, separation, recycling, disposal, and other processing~~ Collection, and thereafter the transfer, transport, Recycling, processing, and disposal of Solid Waste.

2.59 ~~2.36~~Source Reduction. "Source Reduction" shall mean the process of reducing the amount of ~~waste produced~~ Solid Waste generated by the person or organization generating such ~~waste~~Solid Waste.~~Source Reduction occurs through the use of alternative goods and products and/or the reuse of goods and products.~~

2.60 ~~2.37~~Source Separation. "Source Separation" or "Source-Separated" describes the segregation of Recyclable Materials from other Solid Waste by the Generator, combined with Franchisee's use of a collection process for such segregated Recyclable Materials by which they are kept segregated and are delivered to a Processing Facility for ~~recycling~~ Recycling purposes, or to another destination for ~~recycling~~Recycling, reuse, or end-use purposes.

2.61 Special Wastes. "Special Wastes" shall mean waste materials including sewage, sludge, industrial sludge, asbestos, auto bodies, tires, used motor oil, Animal Waste, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling.

2.62 SRRE. "SRRE" shall mean City's Source Reduction and Recycling Element approved by the State of California pursuant to the requirements of AB 939.

2.63 State-Mandated Compliance Reports. "State-Mandated Compliance Reports" shall mean all reports required for City to meet its reporting obligations imposed by statutory mandates, including, but not limited AB 939, AB 341, and 1826, and the regulations implementing such mandates.

2.64 ~~2.38~~Temporary Bin Service. "Temporary Bin Service" shall mean Solid Waste Handling Services provided by a ~~solid waste~~ Solid Waste enterprise on an as needed and temporary basis to any Premises within the City in connection with, including but not limited to, construction, demolition, cleanup or other projects that do not qualify as a "Covered Project" pursuant to Section 6-7-901 of the Irvine Municipal Code, and by use of temporarily placed ~~bins~~Bins.

2.65 ~~2.39~~Term. "Term" shall have the meaning ascribed in Section ~~4.00~~ 5 of this Agreement.

2.66 ~~2.40~~Tipping Fee. "Tipping ~~Fee" or "Disposal~~ Fee" shall mean the fee charged to Franchisee to dispose of Solid Waste at a Landfill, Processing Facility, or other disposal location.

~~Village Commercial Premises. "Village Commercial Premises" shall mean any Premises so designated by City as of the Effective Date, and any Premises so designated by the City Manager thereafter. The Village Commercial Premises designation is intended to apply to Premises located in close proximity to residential areas established to provide~~

~~for the unified commercial needs of neighborhood residents and businesses. Said designation is anticipated to include (although may not include) all areas zoned Neighborhood Commercial and Community Commercial and which are adjacent to or proximate to residential areas as determined by the City Manager, as well as such additional Premises as may be designated by the City Manager. A map indicating all 2.41 Village Commercial Premises as of the Effective Date is attached hereto as Exhibit 1. Said map shall be amended from time to time to reflect additional Premises which may be added to the Village Commercial designation, and amended maps shall be maintained by the City Manager, City shall notify Contractor whenever a Premises is added to the Village Commercial Premises designation. Any premises in the City that is not vacant land and which is not designated as a Village Commercial Premises on the Effective Date hereof, shall not be so designated for the remainder of the Term hereof. No vacant land identified as "undesignated" on the map attached hereto as of the Effective Date hereof shall be redesignated by City as Village Commercial Premises unless and until City has invited all franchisees to submit comments and concerns to City regarding such redesignation.~~

~~2.42Waste Diversion. The diversion of solid waste, in accordance with all applicable federal, state and local requirements, from disposal at solid waste landfills or transformation facilities through recycling, reuse or composting. Where used in this Agreement, the words "diversion" and "divert" shall refer to waste diversion.~~

2.67 Transformation. "Transformation" shall mean incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. "Transformation" does not include composting.

2.68 Village Commercial Premises. "Village Commercial Premises" shall mean that subset of Commercial Premises which have been designated by City as falling within the scope of the Exclusive Franchise Agreement, and which the Parties agree are not within the scope of the nonexclusive franchise granted by this Agreement. The specific Commercial Premises which are designated as Village Commercial Premises for purposes of this Agreement are (i) those Commercial Premises which are located in areas designated as "Exclusive Village Commercial" on the Village Commercial Premises Map, attached hereto as Exhibit A; (ii) Mixed-Use Developments, whether currently in existence or developed in the future, which are deemed for purposes of this Agreement to be Village Commercial Premises, regardless of their location and whether or not said location is designated as "Exclusive Village Commercial" on the Village Commercial Premises Map; and (iii) any Commercial Premises within Planning Area 51 that is re-designated following the Effective Date to a Village Commercial Premises designation as a result of an amendment to the Village Commercial Premises Map pursuant to the terms hereof. Notwithstanding anything herein to the contrary, Village Commercial Premises shall not include hotels, motels, assisted living facilities, convalescent centers or nursing homes, regardless of their location.

2.69 Village Commercial Premises Map. "Village Commercial Premises Map" shall mean the map attached hereto as Exhibit A, titled "Commercial Solid Waste Collection Service Areas." The purpose of the Village Commercial Premises Map is to designate which Commercial Premises are designated as "Exclusive Village Commercial" Premises for purposes of this Agreement, and are thereby within the scope of the Exclusive Franchise

Agreement and conversely outside of the scope of the nonexclusive franchise granted by this Agreement. The Village Commercial Premises Map is not intended to identify the location of Residential Premises, including Premises at which Mixed-Use Developments exist; and, accordingly, Mixed-Use Developments (which are deemed to be Village Commercial Premises) may exist in areas designated as "Nonexclusive Commercial" on the Village Commercial Premises Map.

SECTION 3
NONEXCLUSIVE ~~NON-EXCLUSIVE~~ FRANCHISE

3.1 Grant of Franchise.

3.1.1 General Grant. City hereby grants to Franchisee, and Franchisee shall have throughout the duration of this Agreement, the ~~non-exclusive~~ nonexclusive franchise, right, license and privilege to provide Solid Waste Handling Services within the City Limits, with respect to Solid Waste not subject to ~~City's~~ the Exclusive Franchise Agreement. Generally speaking, the rights granted herein pertain to: (1) Solid Waste Handling Services to ~~Nonexclusive Franchise~~ Commercial Premises~~-~~, excepting Village Commercial Premises, occurring on a regular schedule (such as weekly service)~~, including services to Commercial, Industrial, Agricultural, and Institutional Premises but excluding those Premises designated as Village Commercial Premises or Mixed-Use Development~~; and (2) Temporary Bin Services~~, including the collection of C&D Debris,~~ to any Premises in the City (including Exclusive Franchise Premises). In the event of any uncertainty, ambiguity, and/or dispute as to whether a particular Premises is subject to the Exclusive Franchise Agreement, the determination shall be made by the City Manager, and such determination shall be final. The Parties agree that any such determination is occurring pursuant to Public Resources Code Section 49523, is agreed to by the Parties upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement.

3.1.2 Amendments to Scope of Franchise: The Parties acknowledge that as of the Effective Date, the Village Commercial Premises Map includes that certain land area located in the City's Great Park known as "Planning Area 51" and further shows a current conceptual plan by which to divide Planning Area 51 into individual "Districts." The City has not yet finalized its plans for Planning Area 51, and final Districts and boundaries therefore have yet to be established. Once the final planning for Planning Area 51 is complete, the Village Commercial Premises Map will be amended to depict those premises within Planning Area 51 that are designated as "Exclusive Village Commercial" Premises and those which are designated as "Nonexclusive Commercial" Premises. As of the Effective Date (but subject to change in the future as final plans for Planning Area 51 develop), it is anticipated that land currently shown as Districts 1, 4, 5, 7 and 8 within Planning Area 51 will be developed primarily for residential purposes, and accordingly City anticipates such Districts within Planning Area 51 will be designated as Village Commercial Premises. Moreover, City anticipates that land shown as Districts 2, 3, and 6 within Planning Area 51 will not be developed for residential purposes, and accordingly City does not anticipate designating such Districts within Planning Area 51 as Village Commercial Premises. City shall have the exclusive right to exercise its discretion to determine whether to designate properties within Planning Area 51 as Village Commercial Premises, although in doing so City will bear in mind the following: (i) City's primary consideration will be to minimize Collection Vehicle traffic in Residential Premises; (ii) the Village Commercial Premises designation is intended to apply to

Premises located in close proximity to residential areas, which are established to provide for the unified commercial needs of neighborhood residents. Franchisee agrees that City may amend the Village Commercial Premises Map from time to time to reflect changes to Planning Area 51 as its planning is finalized by City, and that such changes will be reflected on amended maps to be maintained by the City Manager. Moreover, the Parties agree that any such changes effectuated by such amendments to the Village Commercial Premises Map are occurring pursuant to Public Resources Code Section 49523, are agreed to by the Parties upon mutually satisfactory terms, and are part of the consideration for entering into this Agreement. Franchisee expressly acknowledges that any change in scope of the franchise granted hereunder that may occur during the term hereof as a result of a change to the Village Commercial Premises Map as described in this Section is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524.

3.1.3 ~~3.1.2~~Encroachment on Public Rights ~~of~~ -of-Way. Included in the rights granted hereunder, is the right for Franchisee to place Bins in City's ~~Public Rights of Way~~public rights-of-way, subject to the provisions of ~~Title 6 of City's Municipal Code~~Division 7.

~~3.1.3 Prospective Nonexclusive Franchisees. The City Manager shall prescribe an application process for prospective nonexclusive franchisees. The City Manager anticipates accepting new nonexclusive franchisee applications twice annually during designated 30-day application periods to be determined by the City Manager. However, the City Manager in his or her sole discretion may accept applications at any time if he or she deems it necessary or beneficial for the public health, safety, and/or welfare of the City.~~

~~3.1.4 New Commercial Development. Franchisee may provide Solid Waste Handling Services to New Commercial Development pursuant to Section 3.1.1.~~

~~3.1.4.1 The City reserves the right, to the fullest extent permissible by law, to include as a covenant, condition and restriction for future commercial development, including but not limited to New Commercial Development, that the property manager must choose and engage only one franchisee at a time to provide Solid Waste Handling Services for the Premises. The intent of such a covenant, condition and restriction is to limit adverse waste hauling impacts on residential communities where commercial development is adjacent or proximate to residential areas. The City may or may not include such a covenant, condition and restriction in its sole discretion.~~

3.2 Limitations on Scope of Franchise.

3.2.1 Nonexclusive. This ~~Franchise~~ Agreement shall be ~~non-exclusive~~nonexclusive, and no provision hereof shall be deemed to require City to grant similar franchises to one or to any particular number of franchisees, nor to restrict or prohibit City from doing so. Franchisee understands and acknowledges City ~~will~~ may enter similar nonexclusive

franchise agreements pursuant to the same, or substantially similar terms, with any qualified ~~solid waste~~ Solid Waste enterprise~~.~~.

3.2.2 ~~Notwithstanding any other provisions set forth in this Agreement to the contrary, and except as set forth in the Public Resources Code including without limitation Section 49520, the non-exclusive~~ Exclusions. Notwithstanding any other provisions set forth in this Agreement to the contrary, the nonexclusive contract, right, franchise, license, and privilege granted herein excludes:

(a) ~~3.2.2.1~~Solid Waste Handling Services for Exclusive Franchise Premises as defined by this Agreement.

(b) ~~3.2.2.2The collection~~except as provided otherwise herein,~~ –~~ the Collection, transportation, ~~processing~~ or disposal of Hazardous ~~Waste,~~ Contaminants; Hazardous Substances; Hazardous Waste; items commonly known in the waste industry as "universal waste" and/or "e-waste"; biohazardous waste~~,~~; untreated ~~medical waste,~~ Medical Waste; infectious waste; Animal Waste; used cooking fats, oils, grease and similar waste; Special Waste; or other materials which do not constitute Solid Waste.

(c) ~~3.2.2.3~~Those Solid Waste Handling Services, if any, which are governed by or subject to any legal right held by any ~~solid waste~~ Solid Waste enterprise to continue to operate (whether pursuant to ~~an~~ a pre-existing Solid Waste ~~or construction debris~~ permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

~~3.3 Annexation Or Redesignation Of Territory Covered By An Existing Franchise.~~

3.3 ~~3.3.1~~Rights in Annexed Territories. It is the intention of the Parties that, subject to all of the limitations set forth in Section 3.2 above, the nonexclusive franchise granted herein shall apply to any property incorporated into the City Limits during the Term hereof; provided, however, the exercise of the rights granted herein within annexed territories shall be limited by and subject to any legal right ~~for pre-existing solid waste enterprises~~ held by any Solid Waste enterprise to continue to operate (whether pursuant to ~~an existing~~ a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

~~3.3.2 Rights under Public Resources Code Section 49520, et seq.~~

~~3.3.2.1 The parties acknowledge it is conceivable that Franchisee may have a pre-existing permit, license, agreement, franchise or other rights to provide services in territories that may be hereinafter annexed into City, such that Franchisee would have rights pursuant to Public Resources Code section 49520, *et seq*. It is expressly agreed that tire five year notice rights set forth in Public Resources Code Section 49520 shall apply to Franchisee in connection with any such annexed Premises.~~

~~3.3.2.2 It is expressly agreed that the five year notice rights set forth in Public Resources Code Section 49520 shall apply to Franchisee in~~

~~connection with any Premises it services that may hereafter be designated as a Village Commercial Premises by City.~~

~~3.4 Unauthorized Collection.~~

~~3.4.1 No person or entity shall engage in the collection of Solid Waste or otherwise remove any Solid Waste from any Premises in the City and convey it upon, along or across any public street, alley, highway, unless the City Council has granted that person or entity an exclusive or nonexclusive franchise pursuant to Division 7.~~

~~3.4.2 Any Franchisee can and should report any unauthorized collection in the City. Such notice shall be prepared in writing to the City Manager and describe the location, container, and company providing such unauthorized service.~~

~~3.4.3 Penalties for unauthorized collection shall be consistent with Division 7, which provides for misdemeanor prosecutions and suits for public nuisance. Any penalties shall be in addition to the default and termination provisions in a nonexclusive franchisee's franchise agreement. The imposition of penalties shall be in the City's sole discretion.~~

3.4 Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523. If Franchisee has a pre-existing permit, license, agreement, franchise or other rights to provide services in the City, including because of being a Franchisee under the Prior Agreement, then Franchisee expressly acknowledges that any change or modification to the scope of such rights that may be effectuated by this Agreement is occurring pursuant to Public Resources Code Section 49523, is included herein upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement. Moreover, Franchisee expressly acknowledges that any change in scope of such prior rights is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524. Franchisee acknowledges that City has advised it that if it has rights pursuant to Public Resources Code Section 49520 which it does not wish to modify by entering this Agreement, it may choose to continue to operate in City pursuant to such rights rather than enter into this Agreement.

3.5 Notice Pursuant to Public Resources Code Section 49520. The rights granted pursuant to the terms hereof shall expire upon the end of the Term of this Agreement as set forth in Section 5 below. Franchisee shall have no right to continue to provide services in City pursuant to Public Recourses Code Section 49520, or otherwise, following the end of the Term hereof unless a subsequent franchise, contract, or permit is granted to Franchisee by City, or unless this Agreement is amended to provide such rights. This provision is intended to, and shall serve as the notice contemplated by Section 49520 with respect to the franchise rights granted herein.

3.6 ~~3.5~~Processing Facility Approval.

3.6.1 ~~3.5.1~~Approval Required. In order for a Processing Facility to qualify as a CDI Processing Facility, Green ~~Material~~ Waste Composting Facility, or MRF for purposes of the Franchise Fee calculation, the Processing Facility must be approved by the City pursuant to this Section ~~3.5~~ 3.6 at all relevant times~~.~~. Facilities that are not approved pursuant to this Section ~~3.5~~ 3.6 at all relevant times shall be considered "other disposal facilities" for purposes of the Franchise Fee calculation.

3.6.2 ~~3.5.2~~Processing Facility Audit. ~~The~~ City reserves the right to the full extent permissible by law to deny approval to any Processing Facility that does not permit ~~the~~ City to audit the Processing Facility for appropriate Franchise Fee and ~~waste diversion~~ Diversion allocations. The audit may include, but is not limited to, requests for a detailed summary of the facility operations, visual inspections of the facility's sorting and other processes, reviews of ~~diversion~~ Diversion calculation methodology, and requests for an adequate explanation of the selection process of loads to be sorted or directed for disposal.

3.6.3 ~~3.5.3~~Other Jurisdiction Approval. If another jurisdiction has provided written approval to a particular Processing Facility, the City may, but is not required to, accept this approval in lieu of its own approval process.

3.6.4 ~~3.5.4~~Processing Facility Approval List. Upon request, Franchisee may obtain an approved Processing Facility list from the City Manager. Any requested changes or additions to the approved Processing Facility list shall be submitted to the City Manager in writing. Franchisee must obtain the City Manager's written approval prior to Franchisee's use of any facility not appearing on the approved Processing Facility list.

3.6.5 ~~3.5.5~~Approval Timeframe. Processing Facility approval shall be at the sole discretion of the City Manager. Approval decisions shall be made in a timely manner following a request for approval. The City estimates typical approval review may take up to thirty (30) days. The City may provide temporary approval for facilities in cases where a lengthy audit or additional information is being prepared or reviewed.

SECTION 4
ACCEPTANCE; WAIVER

Franchisee agrees to be bound by and comply with all the requirements of this Agreement. Franchisee waives Franchisee's right to challenge the terms of this Agreement under federal, state, or local law, or administrative regulation. Additionally, by and upon the execution of this Agreement, Franchisee agrees to the termination of the Prior Agreement as of the Effective Date, agrees to waive any and all rights under the Prior Agreement, and agrees to release and hold the City harmless from any of the City's obligations thereunder (excepting, however, the right to compensation accrued and unpaid for services provided prior to the Effective Date); provided, however, nothing contained in this provision is intended to or shall relieve Franchisee from any obligation existing under the Prior Agreement pertaining to insurance, indemnification, or other legal obligations to City or Franchisee's Customers (as opposed to obligations to provide service pursuant to the terms thereof), or from any obligation set forth in the Prior Agreement which are

called out as surviving the termination thereof, and all such obligations, including specifically those indemnification obligations relating to Environmental Laws, general liability, and AB 939 shall survive the termination of the Prior Agreement.

SECTION 5~~SECTION 4~~
TERM

~~4.1~~Agreement Term. The term of this Agreement shall ~~be from _____, _____ to June 30, 2017~~commence on October 26, 2017 and end at midnight on August 31, 2026, unless this Agreement is terminated at an earlier date pursuant to Section ~~13~~ 15 hereof, or otherwise.

~~4.2 Renewal Terms. Not less than six (6) months prior to the expiration of the Term, Franchisee may request that the term be extended for up to two (2) Renewal Terms of three (3) years each, for a maximum potential franchise term of sixteen (16) years.~~

~~4.2.1 Renewal Terms shall be granted or denied in the sole discretion of the City Council, exercised In accordance with this section. The City Council shall either: (a) grant the renewal on a finding that the Franchisee is in compliance with this Agreement, and with all federal, state or local laws and regulations applicable to the operation of the nonexclusive franchise, and that the public interest is served by a renewal; or (b) decline to grant any renewal based on a finding either that the Franchisee is not in compliance with this Agreement, or with all federal, state or local laws and regulations applicable to the operation of the nonexclusive franchise, or that the public interest is not serviced by a renewal because, by way of example only, of a change in circumstances or policy related to Solid Waste collection or the nonexclusive franchise system.~~

~~4.2.2 The Franchisee has no vested or contractual right to a Renewal Term.~~

~~4.3 Term Extension. Not less than fourteen (14) days prior to the expiration of the Term or any Renewal Term, the City Council, in its sole discretion, may extend the Term or Renewal Term for a period of up to six months.~~

SECTION 6
CONDITIONS TO EFFECTIVENESS OF AGREEMENT

The satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City in writing, is a condition precedent to the effectiveness of this Agreement:

6.1 Accuracy of Representation. All representations and warranties made by Franchisee and set forth in this Agreement shall be accurate, true, and correct on and as of the Effective Date of this Agreement.

6.2 Absence of Litigation. There shall be no litigation pending in any court challenging the award of this Agreement to Franchisee or the execution of this Agreement or seeking to restrain or enjoin its performance.

6.3 Furnishing of Insurance and Bond or Letter of Credit. Franchisee shall have furnished evidence of the insurance and Surety required by Section 14 hereof, and shall comply with all ongoing requirements relating thereto.

6.4 Effectiveness of City Council Action. The City Council Ordinance approving this Agreement shall have become effective pursuant to California law.

SECTION 7~~SECTION 5~~
FRANCHISEE'S CONSIDERATION

As part of its consideration for the ~~non-exclusive~~ nonexclusive franchise rights contained herein, Franchisee shall provide a Franchise Fee in compliance with this Section ~~5~~7.

7.1 ~~5.1~~Franchise Fee Payment. Franchisee shall pay to City, in lawful money of the United States, the Franchise Fee as calculated pursuant to Section ~~5.2~~ 7.2 during the entire Term of this Agreement. Said Franchise Fee shall be due to City in four (4) quarterly payments, which shall be due on or before the forty-fifth (45th) day after the end of each calendar quarter ~~(January~~ (January-March, April-June, July-September, October-December)~~,~~ . The Franchise Fee shall be delivered to the City Manager on or before May 15, August 14, November 14, and February 14. Franchise Fee payments shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the amounts paid.

7.2 ~~5.2.1~~Franchise Fee Calculation. City intends the Franchise Fee calculation procedure to promote ~~waste diversion~~Diversion. Franchise Fee calculation is based on Franchisee's Gross Receipts and the percentage of Solid Waste Franchisee delivered to, and that was accepted by, various Processing Facilities and other disposal facilities during the immediately preceding calendar quarter. Franchise Fees due to the City shall be paid quarterly and accompanied by a calculation form developed and approved by the City, signed and completed by the Franchisee. The amount of Franchise Fees due to the City shall be determined by:

(a) calculating the total Gross Receipts derived from the ~~collection of solid waste~~ Collection of Solid Waste in the City by Franchisee for the quarterly period;

(b) determining the percentage share of total Gross Receipts attributed to the ~~collection of solid waste~~ Collection of Solid Waste according to the percentage of the total ~~collected solid waste~~ Collected Solid Waste delivered by Franchisee to each of the various ~~disposal and non-~~ Processing Facilities and other disposal facilities identified in this Section ~~5.2.1~~7.2; and

(c) calculating and paying Franchise Fees on such Gross Receipts at the following rates based on the type of ~~disposal or non-~~ Processing Facility or other disposal facility utilized by the Franchisee during the quarter, such that on that portion of total Gross Receipts derived from ~~solid waste collected~~ Solid Waste Collected and delivered to:

(i) a ~~landfill~~Landfill, the Franchise Fee shall be 10%;

(ii) a MRF, the Franchise Fee shall be 3%;

(iii) a CDI Processing Facility, the ~~franchise fee shall be 0%~~Franchise Fee shall be 0%;

(iv) a Green Waste Composting Facility, the Franchise Fee shall be 0%;

~~(iv)a Green Material Composting Facility, the franchise fee shall be 0%;~~

(v) an end user approved by the City Manager in writing, the ~~franchise fee~~ Franchise Fee shall be 0%; and

(vi) other disposal facilities, the ~~franchise fee~~ Franchise Fee shall be 10%.

By way of example only, under the Franchise Fee calculation methodology described in this Section ~~5,2.1 herein~~7.2, a Franchisee that earns $60,000 in Gross Receipts by collecting 100,000 tons of ~~solid waste~~ Solid Waste in a given calendar quarter, and delivers half of the ~~collected~~ Collected waste tonnage to the ~~landfill~~ Landfill and the other half of the ~~collected~~ Collected waste tonnage to a MRF, would pay a total of $3,900 in Franchise Fees (equal to a 10% Franchise Fee on that portion of the Gross Receipts attributed to ~~solid waste~~ Solid Waste landfilled and a lower 3% Franchise Fee on that portion of Gross Receipts attributed to ~~solid waste~~ Solid Waste delivered by Franchisee to a MRF.

~~5.3 Annual Financial Reports. At least annually, pursuant to Section 10.2, Franchisee shall provide the City with an audited financial report to demonstrate that the Contractor has fully paid the Franchise Fee for the preceding year. Pursuant to Sections 10.3 and 10,4, the City shall have the right to audit and inspect the Franchisee's books and records related to the Franchisee's performance under this Agreement.~~

~~5.4Use of Franchise Fees. Franchise Fees paid to City by Franchisee, and not otherwise used to offset costs incurred by City in the regulation of Solid Waste matters, shall be used to implement the City's Source Reduction and Recycling Element (SRRE).~~

7.3 ~~5.5~~Franchise Fee Review. The Franchise Fee calculation percentages specified in Section ~~5.2.1(3)~~ 7.2 will be reviewed by City on an ongoing basis, but not more often than annually, and if deemed necessary or appropriate by City, may be reduced or increased by approval of the City Council. City shall provide Franchisee with ninety (90) days advance written notice of any fee adjustment before such an adjustment shall take effect.

SECTION 8~~SECTION 6~~
ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS

In the event Franchisee fails to make any of the payments provided for in this Agreement on or before the dates due, Franchisee shall pay as consideration the following amounts:

8.1 ~~6.1~~A sum of money equal to the Franchise Fee due;

8.2 ~~6.2~~A sum of money equal to five percent (5%) of the amount due. This amount is required in order to defray those additional expenses and costs incurred by City by reason of the delinquent payment including, but not limited to, the cost of administering, accounting for, and collecting said delinquent payment and the cost to City of postponing services and projects necessitated by the delay in receiving the revenue; and

8.3 ~~6.3~~Interest on the delinquent sum (excluding the late payment charge referred to in Section ~~6.2~~8.2) at the maximum legal rate, with said sum to be applied as interest for loss of use of the money due and to be calculated commencing on the date first due through and including the date upon which full payment, including all interest and penalties, is made.

SECTION 9~~SECTION 7~~
OPERATING PROCEDURES

9.1 ~~7.1~~General. Franchisee shall furnish all labor, supervision, materials, supplies, and equipment necessary to provide Solid Waste Handling Services in accordance with the terms of this Agreement.

9.2 ~~7.2~~Compliance with Applicable ~~Law~~Laws. Franchisee shall ~~folly~~ fully comply with all Applicable Laws, including without limitation, Division 7 as it may be amended from time to time. Franchisee shall obtain and maintain, at Franchisee's sole cost and expense, all permits and licenses applicable to Franchisee's operations under this Agreement, including specifically, without limitation, a City of Irvine Business License.

9.3 ~~7.3~~Vehicles and Equipment. All Collection Vehicles and all Bins ~~and vehicles~~ used by Franchisee in the performance of Solid Waste Handling Services hereunder shall comply with the vehicle and equipment requirements set forth in Division 7 and the provisions of this Section ~~7.~~9.

9.3.1 General Requirements for Collection Vehicles. All Collection Vehicles shall comply with all rules and regulations of the South Coast Air Quality Management District, the Air Resource Board, and any other regulatory body that may be in effect during the Term of this Agreement, as well as other federal, state and local laws and regulations that may be enacted during the Term of this Agreement. All Collection Vehicles shall meet or exceed such air quality standards as may be adopted by the forgeoing regulatory bodies during the Term. All Collection Vehicles shall comply with the requirements in the South Coast Air Quality Management District's ("SCAQMD") Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles).

9.3.2 Specific Requirements for Collection Vehicles. Each Collection Vehicle utilized by Franchisee in the performance of Solid Waste Handling Services shall meet the following minimum standards:

(a) Each Collection Vehicle shall be fueled by clean air technology in accordance with Applicable Laws.

(b) ~~7.3.1General. All vehicles used by Franchisee in providing Solid Waste and/or Recycling services~~ Each Collection Vehicle shall be registered with the California

Department of Motor Vehicles ~~and Department of Transportation~~.~~All vehicles shall meet or exceed all legal standards, including but not limited to, California Air Resource Board (CARB) compliance standards and Department of Transportation requirements. Franchisee agrees to maintain all of its vehicles in compliance with the provisions of the California Vehicle Code.~~

~~7.3.2Clear Air Emission Alternative Vehicles. The City encourages clean air emissions alternatives. The City Manager in his or her sole discretion shall determine which vehicles qualify as Clean Air Emission Alternative Vehicles and shall maintain a list of qualifying vehicles available upon request. The list may be amended from time to time to add or remove qualifying vehicles based on applicable City, State and Federal emission standards. The City will provide a one-time Clean Air Emission Alternative Vehicle Franchise Fee credit for each new Clean Air Emission Alternative Vehicle purchased and used to provide Solid Waste Handling Services in the City, The Franchise Fee credit shall be five hundred dollars ($500) and shall apply to the first Franchise Fee payment following full or partial use of the Clean Air Emission Alternative Vehicle within tire City Limits for one full calendar quarter. Only Clean Air Emission Alternative Vehicles purchased new (*i.e.* not previously used vehicles) after the Effective Date of this Agreement are eligible for the one-time credit.~~

(c) Each Collection Vehicle shall be inspected regularly by Franchisee to ensure it meets the requirements of the California Vehicle Code and the California Highway Patrol. Franchisee shall provide copies of its Biannual Inspection of Terminal inspection reports to City within thirty (30) days of its receipt of such reports and shall make all records related to its Collection Vehicles, including Franchisee's maintenance records, available to City upon request by the City Manager.

(d) Each Collection Vehicle shall be equipped with devices capable of covering every open section of the Collection Vehicle in which Solid Waste may be placed and, while operating upon the public rights-of-way, shall be covered so as to prevent any Solid Waste from falling or being blown or otherwise dislodged from the Collection Vehicle.

(e) Each Collection Vehicle shall be continuously maintained so as to both: (1) meet the highest industry standards with regards to efforts to prevent liquid from leaking and to the degree possible ensure each Collection Vehicle is "watertight" and "leak-proof" and, (2) at all times comply with the provisions of all Applicable Laws, including, without limitation, the Vehicle Code and any applicable NPDES permit, with regard to materials leaking from Collection Vehicles. Franchisee shall be responsible to promptly clean any spillage or Solid Waste that leaks or otherwise escapes the Collection Vehicle.

(f) As frequently as determined necessary by the City Manager, each Collection Vehicle shall be painted and shall have routine body work performed so that such vehicles do not become unsightly, as determined by the City Manager.

(g) ~~7.3.3Vehicle Identification.~~ Franchisee's name, local or toll free telephone number, and a ~~unique vehicle identification number designated by Franchisee for each vehicle shall be prominently displayed on all vehicles.~~ vehicle number shall be visibly printed or

painted in letters not less than five (5) inches in height on both sides of each Collection Vehicle. Any other information or signage printed, painted, or displayed on Franchisee's Collection Vehicles, when such vehicles are providing Collection services within City Limits, shall be subject to approval by City. Collection Vehicles are not required to be for exclusive use in the City. ~~Franchisee shall annually furnish City a current vehicle inventory.~~

(h) Each Collection Vehicle shall be maintained in a clean and sanitary condition both inside and out and shall be washed at least once every seven (7) calendar days and steam cleaned on a regular basis.

(i) Each Collection Vehicle shall carry a broom, shovel, and operable fire extinguisher, and shall be equipped with a communication device sufficient to allow the driver to communicate directly with Franchisee's dispatcher and/or main office.

(j) Each Collection Vehicle shall be kept in good repair and working order, and shall be equipped with appropriate safety equipment, including any new safety related technologies that become standard in the waste industry, and at a minimum shall have a video monitor-based back-up system, or its equivalent. Franchisee shall keep a sufficient supply of replacement parts and equipment on hand to ensure adequate vehicle maintenance and timely and continuous performance of the Solid Waste Handling Services contemplated by this Agreement.

(k) Franchisee shall inspect each Collection Vehicle daily to ensure that all equipment is operating properly. Collection Vehicles which are not operating properly shall be removed from service until repaired and operating properly. Franchisee shall perform all scheduled maintenance functions upon Collection Vehicles in accordance with the manufacturer's specifications and schedule. Franchisee shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a safe and operable condition. Franchisee shall keep accurate records of all Collection Vehicle maintenance and repair, recorded according to date and mileage, including signed verifications that repairs and maintenance have been properly performed, and shall make such records available to City upon request.

(l) No Collection Vehicle shall be utilized if it is leaking brake, hydraulic, or other fluids, and Franchisee shall clean up any leaks or spills from its Collection Vehicles per the NPDES permits in effect at the time. No fluids shall be washed into storm drains at any time. All NPDES dry-cleaning measures shall be complied with. All Collection Vehicles must be equipped with absorbent for such cleanup efforts.

(m) Franchisee shall annually furnish City a written inventory of all equipment, including Collection Vehicles, used in providing Solid Waste Handling Services pursuant to this Agreement. This inventory shall list all equipment by manufacturer, ID number, date of acquisition, type and capacity.

(n) Franchisee shall utilize Collection Vehicles of a size, weight, nature, and type so as to not be unreasonably intrusive on the community with respect to noise, emissions, maneuverability, safety, and other factors, and to avoid or minimize pavement damage and wear and tear of the street or adjacent properties, as approved by the City Manager.

(o) Franchisee shall not load Collection Vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local laws or regulations. Noise levels of equipment used for Collection shall not exceed 75db (seventy-five decibels) when measured at a distance of twenty-five (25) feet from the Collection Vehicle, five (5) feet from the ground.

(p) The average fleet age, when applied to all Collection Vehicles used by Franchisee within City Limits, shall be no more than ten (10) years of age at any time during the Term, nor may any Collection Vehicle be purchased for use within City Limits that is over seven (7) years of age at the time of purchase. For purposes of the average fleet age requirement, Collection Vehicles refurbished to specifications approved by the City Manager shall be considered as new when placed back into service.

9.3.3 Specific Requirements for Bins.

(a) Franchisee shall be responsible to maintain and replace, as necessary, all of its Bins.

(b) All of Franchisee's Bins shall be maintained by Franchisee in good repair, and any question as to the meaning of this standard shall be resolved by the City Manager.

(c) Franchisee shall ensure it maintains an accurate list that contains the total number and type of its Bins at each service address, as well as the frequency of Collection for each such Bin. Franchisee shall keep this list up to date at all times, provide it to City upon request, and shall include a current updated list with each Annual Report submitted pursuant to Section 10.1.

(d) All Bins which are used primarily for the disposal of Solid Waste containing liquids shall be maintained by Franchisee in a watertight condition; and shall at all times comply with the provisions of any applicable NPDES permit.

(e) Franchisee shall replace any damaged or unsightly Bins, and shall remove any graffiti that appears on its Bins, within one (1) business day after becoming aware of the damage or unsightly condition.

(f) All Bins shall be kept freshly painted in a uniform fashion.

(g) ~~7.3.4Bin Identification.~~ Franchisee's name and local telephone number shall be placed on all front load bins and roll-off boxes used for Solid Waste Handling Services within the City, in letters not less than three (3) inches high, so as to be visible when the Bin is placed in use. Any smaller wheeled style automated carts shall contain, at a minimum, ~~the~~ Franchisee's name and a distinct logo or identification number.

~~7.3.5 Cleaning and Maintenance. Franchisee shall maintain all of its properties, facility(ies), and equipment used in providing Solid Waste Handling Services under this Agreement in a safe, neat, clean and operable condition at all times. Each vehicle shall be designed so that Solid Waste, oil, or grease will not blow, fall, or leak out of the vehicle onto the street. All Solid Waste shall be~~

~~transported by means of vehicles equipped with watertight bodies fitted with close-fitting covers. Vehicles used in the collection of Solid Waste and/or Recycling shall be washed on a regular basis so as to present a clean appearance and minimize odors.~~

9.4 ~~7.4~~Performance Standards. Franchisee shall perform Solid Waste Handling Services hereunder in a workmanlike manner consistent with good housekeeping standards and all relevant provisions of Applicable Laws, including without limitations, the provisions of Division 7.

9.5 ~~7.5~~Noise and Disruption. Franchisee shall perform Solid Waste Handling Services ~~as required~~ hereunder in such a manner as to minimize noise and other disruptive impacts including, without limitation, those upon traffic.

9.6 ~~7.6~~Restriction on Manner of Collection~~.~~.

9.6.1 ~~7.6.1In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material collected~~ No Commingling Without Consent. In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material Collected within the City Limits and processed, ~~recycled~~ Recycled and/or disposed pursuant to this Agreement, no load of Solid Waste ~~collected~~ Collected by Franchisee from within the City Limits shall be commingled with Solid Waste collected by Franchisee from any person or place outside the City Limits or outside the area governed by this Agreement. Notwithstanding the foregoing, City, in its sole and absolute discretion, may allow Franchisee to commingle Solid Waste or Recyclable Material it ~~collects~~ Collects within the City Limits with that collected from persons or places outside the City Limits or outside the area governed by this Agreement, if:

(a) ~~7.6.1.1~~Franchisee proposes a means acceptable to City by which~~,~~ to accurately identify and report the Solid Waste and Recyclable Material collected from both within and outside the City Limits and specifically within areas covered by this Agreement as distinctive from areas not covered by this Agreement; and

(b) ~~7.6.1.2~~Franchisee obtains written consent from the City Manager to implement commingling pursuant to any such proposal; and

(c) ~~7.6.1.3~~Franchisee's proposal as approved by the City Manager is successfully implemented such that timely and accurate information regarding the Solid Waste and/or Recyclable Material ~~collected~~ Collected from within the City Limits, and specifically within areas covered by this Agreement, and the amount of Solid Waste and/or Recyclable Material ~~collected~~ Collected within the City that is ~~diverted~~ Diverted from ~~landfills~~ Landfills as a result of ~~recycling~~ Recycling or other programs, is provided for all reporting purposes; and

(d) ~~7.6.1.4~~Franchisee's proposal meets all obligations that may exist relating to the use of certain ~~landfills~~ Landfills for deposit of Solid Waste ~~collected~~ Collected in the City, including any such obligations imposed by the County Agreement.

9.6.2 Withdrawal of Consent for Commingling. The City Manager may, by giving written notice to Franchisee, with or without cause, withdraw any consent given to Franchisee by which commingling is authorized.

9.7 ~~7.7~~Precautions Regarding the Collection of Hazardous Materials.

9.7.1 ~~7.7.1~~Contractual Prohibition Requirement. Franchisee shall include as a condition to its contractual agreement with its Customers a provision~~,~~ prohibiting disposal of Hazardous Waste in any of Franchisee's Collection Vehicles ~~or Bins~~, ~~and~~ Bins, or other equipment~~.~~.

9.7.2 ~~7.7.2Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, County~~Load Check Program. Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, county, ~~State~~ state and ~~Federal~~ federal Hazardous Waste Regulations, shall be maintained for ~~the length of the term~~ a minimum of five (5) years following the expiration of the Franchise, and shall be made available to the City Manager upon request. Further, prior to destroying or discarding any of such records, Franchisee shall notify City, and upon City's election, Franchisee shall deliver such records to City. Franchisee shall handle and dispose of any such Hazardous Materials in accordance with Applicable Laws.

9.8 ~~7.8~~Service Routes. Franchisee hereby acknowledges and agrees that the City Manager shall have the authority to set Solid Waste Handling Service routes, including but not limited to entry and exit points to and from ~~commercial~~ Commercial Premises, and to direct Franchisee's ~~vehicles providing Solid Waste Handling Services~~ Collection Vehicles to follow such routes, when necessary, in the City Manager's sole discretion, to reduce negative impacts on residential areas and City infrastructure.

9.9 Commercial Premises Recycling Services.

9.9.1 Franchisee shall promote, offer and provide a Recycling program for its Customers (the "Commercial Premises Recycling Program") that at a minimum meets the standards required under AB 341, and such program shall be consistent with any Ordinances adopted by the City to implement AB 341. Franchisee shall also assist the City in identifying Customers that are not in compliance with the Recycling requirements set forth in AB 341. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote Recycling services, determine if such Customer is receiving Recycling services from a third party in compliance with the requirements of AB 341, attempt to resolve any logistical detriments to providing Recycling services thereunder, and notify and request assistance from City for potential follow-up action where there is repeated refusal to implement the Commercial Premises Recycling Program. Concurrently with Franchisee's submittal of quarterly and Annual Reports, Franchisee shall submit a report to City that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and

visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to its Customers regarding AB 341 requirements, consideration of ordinances which may assist with gaining compliance with AB 341 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Premises Recycling Program. Franchisee shall be responsible for ensuring that its Commercial Premises Recycling Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements.

9.9.2 Franchisee shall provide commingled or Source Separated Recycling Collection services to all of its Customers. Franchisee shall Collect Recyclable Material from each Customer at frequencies agreed upon with such Customer, but not less than once per week. As of the Effective Date, Customers shall be allowed to deposit, at a minimum, the following materials in Recycling Bins for Collection by Franchisee: paper (all types – anything that "tears"), cardboard, wooden pallets, beverage containers, plastics (including, without limitation, PET, HDPE,#3-7), plastic film, plastic bags, polystyrene packaging material, metals, and other Recyclable materials standard in the Recycling industry, as determined by the City Manager. Franchisee agrees to meet from time to time with City, as needed, and in good faith, to consider modifications to the above minimum list of Recyclable Material, and/or to address developments in processing technologies, emerging uses for various types of materials, changes in available markets, or other relevant issues.

9.9.3 On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Recycling services and programs. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Recycling services and programs to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Recycling services are available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by City, samples of materials provided to said Customers during the subject quarter.

9.10 Commercial Organics Program. Franchisee shall promote, offer and provide an Organics Collection program to all of its Customers (the "Commercial Organics Program"), to be approved by the City Manager, that at a minimum meets the requirements of AB 1826. Franchisee's Commercial Organics Program shall provide for the Collection of Organics separately from other Solid Waste, in Bins, bags, or by other methods approved in advance by the City Manager, and shall thereafter deliver or arrange for the on-going delivery of such Collected Organics to a Diversion facility approved by City. Franchisee shall also assist City in identifying Customers that are not in compliance with the requirements set forth in AB 1826. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote its Commercial Organics Program, determine if such

Customer is receiving Organics services from a third party in compliance with the requirements of AB 1826, attempt to resolve any logistical detriments to providing services offered thereunder, and notify and request assistance from the City for potential follow up action where there is a repeated refusal to implement the Commercial Organics Program. Concurrently with Franchisee's submittal of its quarterly and Annual Reports, Franchisee shall submit a report that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to Customers regarding AB 1826 requirements, consideration of ordinances which may assist with gaining compliance with AB 1826 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Organics Program. Franchisee shall be responsible for ensuring that its Commercial Organics Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements. Franchisee shall produce, keep current, and provide information specifically outlining its Commercial Organics Program, which shall specifically include the annual publication and distribution of a brochure describing this service to all applicable Customers in City. On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Commercial Organics program. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Commercial Organics program to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Commercial Organics program is available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by the City Manager, samples of materials provided to said Customers during the subject quarter.

9.11 Other Collection Programs As May Be Required by Law. In the event CalRecycle, or any federal or state law or regulation, imposes upon City or Franchisee a requirement for the implementation of any Source Separated program for the Collection of any type of discarded material (whether or not meeting the definition of Solid Waste hereunder) not already covered by this Agreement but applicable to Franchisee's Customers, Franchisee shall design and present a program to City to comply with such requirement, which program shall meet the City Manager's reasonable approval ("Proposed Program").

Franchisee shall present the Proposed Program within ninety (90) days of a request to do so by City. The Proposed Program shall include a detailed description of the following: (1) method of Collection; (2) equipment to be used; (3) materials to be Collected; and (4) proposed promotional and public education materials.

9.12 Guaranteed Minimum Franchisee Recycling Rate. Franchisee shall conduct its operations hereunder such that a minimum of fifty percent (50%) of all Solid Waste Collected from Franchisee's Customers (taking into account Diversion achieved by efforts other than its services) is Diverted from disposal at Landfills for each calendar year beginning January 1, 2018 ("Recycling Diversion Requirement"). For the purposes of this Section, Diversion includes only Recycling methods, Transformation (and/or other forms of converting Solid Waste into energy), and other processes which are accepted by the State toward meeting City's Diversion goal under AB 939. Franchisee shall not be entitled to a reduction in the Recycling Diversion Requirement, or a rate adjustment, if or when:

- Transformation or other facilities are no longer available for any reason;
- CalRecycle Diversion credit under AB 939 or other Applicable Laws is no longer provided for Solid Waste sent to a Transformation facility; or
- CalRecycle Diversion credit under AB 939, AB 1594, or other Applicable Laws expires for Green Waste used as alternative daily Landfill cover.

At such time as City discovers that CalRecyle Diversion credit under AB 939 or other Applicable Law will no longer be provided for Solid Waste sent to a Transformation facility, City shall issue formal notice to Franchisee that any Solid Waste delivered to a Transformation facility from the date specified in City's notice through the end of that calendar year shall be subject to the 10% Franchise Fee, and shall not be eligible for Diversion credit. Notwithstanding anything in this Agreement to the contrary, Franchisee's Diversion requirements under this Agreement shall be subject to all Applicable Laws, such that if Diversion requirements in the State of California increase, Franchisee shall be required to comply with such increased Diversion requirement.

To comply with this Section, Franchisee is required to submit timely tonnage reports supporting the Recycling Diversion Requirement, and to provide supporting documentation as may be requested by City or its designee as part of, or independent of, an audit. Failure to meet, and fully support, the Recycling Diversion Requirement may result in termination of this Agreement pursuant to Section 15.

9.12.1 Implementation of Additional Diversion Services. In the event City does not meet the current Diversion goal of fifty percent (50%) imposed by AB 939, and City finds that Franchisee is not achieving the minimum fifty percent (50%) Diversion requirement pursuant to this Section 9.12, City may direct Franchisee to perform additional services (including the implementation of new Diversion programs) or modify the manner in which it performs existing services, and Franchisee agrees to do so.

9.13 ~~7.9~~Compliance and Penalties. City may provide Franchisee with written notice of violations of this Section ~~7~~. If Franchisee fails to cure any noticed violation within a reasonable period of time determined in City's sole discretion, the end date of which is stated in ~~tire~~ the written notice, the City may charge Franchisee up to Two Hundred Fifty Dollars ($250~~.~~) per day for each violation identified in ~~tire~~ the written notice. Upon request, City may in its sole discretion, but is not required to, extend Franchisee's period to cure~~.~~. The penalties

in this ~~section~~ Section are in addition to ~~the~~ any penalties assessed pursuant to other provisions ~~of Section 13~~in this Agreement.

SECTION 10~~SECTION 8~~
REPORTING REQUIREMENTS

The Parties acknowledge that City will require reporting at various intervals by which information important to City can be compiled and analyzed. Throughout the Term the Parties agree to work together to address City's needs with respect to the information to be contained in reports prepared by Franchisee. The following is intended as a starting point in order to have established an objective baseline for reporting, but the frequency and content of the reports called out below may be changed by agreement of the Parties; provided any such change is approved by the City Manager in writing.

10.1 ~~8.1~~Annual Report. On or before the 45th day following January 1st of each year during the Term of this Agreement, Franchisee shall submit a written ~~Annual Report and Operations Plan~~ annual report and operations plan through completion and submittal of a form developed and approved by the City Manager (each such report, an "Annual Report"). The Annual Report shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the information provided. The Annual Report shall include, but may not be limited to, information on the amount of ~~solid waste collected~~Solid Waste Collected, disposed of, and ~~diverted~~Diverted, the methods utilized to ~~collect~~ Collect such ~~solid waste~~Solid Waste, and identifying the disposal and non-disposal facilities to which ~~tire~~ the Franchisee delivered such ~~solid waste~~Solid Waste. At a minimum, ~~in~~ the Annual Report shall include all of the following:

10.1.1 Total Tonnage Collected and Diverted. A summary of the total tons of Solid Waste Collected in City in the preceding year as well as a summary of the total tonnage Diverted from the State's landfill systems during that time frame.

10.1.2 State-Mandated Compliance Reports. Information and State-Mandated Compliance Reports, in a form and content approved by the City Manager.

10.1.3 ~~8.1.1~~Yearly Comparison. In the second year and each subsequent year during the Term of the Agreement, Franchisee shall provide a year-by-year comparison, by weight, of Solid Waste disposal and ~~Solid Waste diversion~~Diversion.

10.1.4 ~~8.1.2~~Gross Receipts and Franchise Fee. Franchisee shall provide a total revenue statement, ~~stating each quarter's Gross Receipts and Franchise Fees. Franchisee shall provide all the information necessary for its Franchise Fees calculations. All financial documentation shall be certified by the Franchisee's financial officer and one additional guarantor~~certified by the chief financial officer of Franchisee, setting forth the quarterly Franchise Fees paid and the basis for the calculation thereof, including specifically a breakdown of sources of revenue included in Gross Receipts and the amount of revenue derived from each such source comprising Gross Receipts.

10.1.5 ~~8.1.3~~Landfill and Processing Facilities. Franchisee shall provide the name and location of all Landfills, Processing Facilities, end users, and other disposal facilities used to dispose of material ~~collected~~ Collected from the City.

10.1.6 ~~8.1.4~~Customer ~~-~~/Bin Counts. Franchisee shall provide the number of Customers that received routine commercial service ~~and~~ , the number of Customers that received Temporary Bin Service, and the Bin data required to be compiled and submitted by Franchisee pursuant to Section 9.3.3. In addition, Franchisee shall provide the number of Customers serviced in the City by processing type, including: Landfill Customers, MRF Customers, ~~CDI Processing Facility Customers,~~ and Green ~~Material~~ Waste Composting Facility Customers. Also, Franchisee shall include the number of Source-Separated ~~recycling~~ Recycling Customers.

10.1.7 ~~8.1.5~~Diversion Efforts. Franchisee shall describe ~~diversion~~ Diversion efforts provided to Customers. Include staffing time, educational information provided, and other activities provided to help promote ~~recycling~~ Recycling within commercial and industrial businesses.

10.1.8 ~~8.1.6~~Franchisee Recycling Plan. Franchisee shall provide an annual update to the Recycling Plan required by Section ~~8.3~~10.3. In addition, Franchisee shall summarize each previous year's Recycling Plan.

10.1.9 ~~8.1.7~~Vehicle List. Franchisee shall provide an updated list of vehicles to be used to provide Solid Waste Handling Services in the City.

10.1.10 ~~8.1.8~~Processing Facility Listing. Franchisee shall provide an updated list of Processing Facilities to be used by Franchisee.

10.2 ~~8.2~~Quarterly Summary Reports. No later than forty five (45) days following each calendar quarter during the Term of this Agreement, Franchisee shall submit quarterly reports including the same information required by Section ~~8,~~10.1 under the headings: Tonnage, Diversion, and State-Mandated Compliance Reports; Gross Receipts and Franchise Fee; Landfill and Processing Facilities; Customer Counts; and Diversion Efforts.

The quarterly reports shall be submitted to the City Manager. ~~Reports~~ Each quarterly report shall be accompanied by a statement ~~certified by an~~ , included at the bottom of such report, by the chief financial officer of Franchisee ~~attesting~~ certifying to the accuracy~~, statements listed at the bottom of each~~ of the report.

The Franchise shall maintain in its files for the Term of this Agreement, and at least three (3) years thereafter, tonnage receipts provided to Franchisee by each Landfill or Processing Facility used by Franchisee to dispose of waste ~~collected~~ Collected in the City. Franchisee shall provide such receipts for the audit financial analysis or upon request of City. This data will be used by City to verify Franchisee's quarterly reports. City may require, in its discretion, and Franchisee shall provide, additional information in connection with the quarterly reports, such as the number and types of businesses serviced, or other information City deems useful or appropriate.

10.3 ~~8.3~~Franchisee Recycling Plan.

10.3.1 ~~8.3.1~~Recycling Plan. Franchisee shall develop and submit a Recycling Plan which must be approved in writing by the City Manager before Franchisee commences Solid Waste Handling Services under this Agreement. Approval of the Recycling Plan shall be in the City Manager's sole discretion. Approval shall be based on the City Manager's review of the following Recycling Plan requirements. The City Manager may authorize, in writing, Franchisee to commence Solid Waste Handling Services while the Franchisee's Recycling Plan is under review. Should the City Manager subsequently reject Franchisee's Recycling Plan, Franchisee must immediately cease operations unless otherwise authorized, in writing, by the City Manager to continue services while Franchisee develops a new Recycling Plan. The Recycling Plan shall include the following:

(a) Statement of Overall Recycling Goals and Focus.

(b) Statement of Targeted Means to Increase Diversion Opportunities.

(c) Processing Facilities and Diversion information including:

- Processing Facilities to be used and their respective types.
- Estimated Solid Waste weight to be ~~collected~~ Collected by Franchisee within the City Limits in the current calendar year.
- Estimated Solid Waste ~~collected~~ Collected within the City Limits to be delivered by Franchisee and accepted by each Processing Facility in the current calendar year.
- How, if at all, Solid Waste will be processed between ~~collection~~ Collection and delivery to a Processing Facility.
- The ~~solid waste diversion~~ Diversion rate~~, if available,~~ of each Processing Facility.

(d) Marketing and Education Strategy information including:

- Franchisee staff and dedicated hours per week focused on ~~waste diversion~~Diversion.
- Information Franchisee intends to provide its Customers to encourage ~~waste diversion~~ Diversion (e.g. brochures, guides, price incentives).

(e) Target Goals information including:

- Franchisee's Diversion Target Goals, in tonnage, by material type and Processing Facility.

- Franchisee's Customer Target Goals to increase the number of Customers that have ~~recycling~~Recycling, reuse, composting, or other ~~recycling~~ Recycling services, including efforts to increase Source Reduction ~~and Source Separation~~.

10.3.2 ~~8.3.2~~Annual Update. Franchisee shall submit on an annual basis an updated Recycling Plan as described in this Section ~~8.1.6~~10.3. In addition, the annual Franchise Recycling Plan shall summarize each previous year.

~~AB 939 Reporting. Franchisee shall provide all information and reports required by City to meet its reporting obligations imposed by 8.4 AB 939 and the regulations implementing AB 939, in a form and with content approved by the City Manager.~~

10.4 ~~8.5Adverse Information. Franchisee shall submit to City copies of all~~ Adverse Information. Franchisee shall provide City copies of all reports, pleadings, applications, notifications, communications, and documents ~~or other materials of any kind submitted by Franchisee to~~, as well as copies of all decisions, correspondence, and actions ~~by, any federal, state, or local court, regulatory agency, or other government body relating~~ , and other material adversely affecting this Agreement, or related in any manner to Franchisee's performance of ~~services pursuant to this Agreement~~this Agreement, submitted or received by Franchisee to or from the United States Environmental Protection Agency, CalRecycle, the California Regional Water Quality Control Board, and any other federal, state, regional, or local regulatory agency. Copies shall be submitted to City simultaneously with Franchisee's filing of such matters with~~, or immediately after receipt of such information from, any of said agencies~~ said agencies. Franchisee's routine correspondence to said agencies need not be automatically submitted to City, but shall be made available to City upon written request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.5 ~~8.6~~Other Reporting Requirements. All reports and records required under this or any other Section ~~hereof~~ of this Agreement shall be furnished at the sole expense of Franchisee. Franchisee agrees to submit such reports and information on computer discs or electronically in a format compatible with City's computer system as it may be upgraded from time to time, if requested by City. A copy of each of Franchisee's annual and other periodic public financial reports and those of each of its parent, subsidiary, and affiliated corporations and other entities, as City requests, shall be submitted to City within thirty (30) days after City giving notice to Franchisee of such a request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.6 ~~8.7~~Failure to Report. The refusal, failure, or neglect of Franchisee to file any of the reports required by this Agreement within thirty (30) days such report is due, or the inclusion of any materially false or misleading statement or representation made knowingly by Franchisee in such report, shall be deemed a material breach of this Agreement, and shall subject Franchisee to all remedies, legal or equitable, which are available to City under this Agreement or otherwise. In the event City elects to suspend Franchisee's franchise rights for Franchisee's failure to file a report, as a condition to Franchisee's reinstatement, Franchisee

shall be required to pay to City a penalty in the amount of Five Hundred Dollars ($500) for each thirty (30) day period in which the applicable report is delinquent.

10.7 ~~8.8~~Confidentiality. To the extent permitted by law, ~~the~~ City shall endeavor to keep confidential any confidential information, such as Customer information or information regarding Franchisee's financial matters, that is submitted in connection with any reports required hereunder.

SECTION 11~~SECTION 9~~
AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION

11.1 ~~9.1~~Warranties and Representations.

(a) ~~9.1.1~~Franchisee warrants and represents that it is familiar with City's ~~waste characterization study as set forth in City's SRRE. Franchisee further warrants and represents that~~ SRRE, it is familiar with City's waste stream, and it has the ability to and will provide sufficient programs and services to ensure City will meet or exceed the ~~diversion~~ Diversion requirements (including, without limitation, amounts of Solid Waste to be ~~diverted~~Diverted, time frames for ~~diversion~~Diversion, and any other requirements) set forth in AB 939, and all amendments thereto, with respect to the Customers it services hereunder.

(b) ~~9.1.2~~Without regard to any related indemnification requirements, Franchisee guarantees to City that it shall carry out its obligations under this Agreement so that (1) both it and City will at all times be in compliance with the requirements of all Applicable Laws, including specifically AB 939, AB 341, and AB 1826, and (2) City will meet or exceed the ~~diversion~~ Diversion requirements (including, without limitation, amounts of Solid Waste to be ~~diverted~~Diverted, time frames for ~~diversion~~Diversion, and any other requirements) set forth in AB 939, AB 341, and AB 1826, as well as the regulations implementing ~~AB 939,~~ each of them and any and all amendments ~~thereto~~ to each of them, with respect to the Customers Franchisee services hereunder. In meeting this obligation~~,~~, Franchisee shall be mindful of and comply with all requirements of ~~tire~~ the County Agreement, including specifically, without limitation, the requirements thereof generally relating to (i) the delivery of Solid Waste only to transfer stations that provide quarterly certifications of Solid Waste delivered, and (ii) the disposal of residual Solid Waste that remains after ~~recycling~~ Recycling processes have been completed. Commencing immediately upon the Effective Date, Franchisee shall implement all programs ~~identified in the City's SRRE and HHWE to the degree~~ necessary to ensure City complies with ~~AB 939. Franchisee shall implement the public education and awareness portions of the SRRE and HHWE at Franchisee's expense; except as otherwise indicated herein. In this regard, City (with the assistance of the Chamber of Commerce, other similar groups, or other funding sources) will bear the printing and other costs of producing educational materials, and Franchisee shall bear the cost of distributing such materials to its Customers as directed by City. Franchisee shall provide City with written reports relating to its services covered by this Agreement, as distinct from any services it provides within the City not covered by this Agreement, in a form satisfactory to City~~ all state-mandated programs relevant to the services provided hereunder and shall perform public education, awareness, and outreach activities as required by any state-mandated program or as reasonably required by the City Manager. Franchisee shall submit to the City Manager for review and approval all proposed written public educational, awareness and outreach materials.

Franchisee shall engage in any required education, awareness, and outreach activities within thirty (30) days of commencing services to any new Customers, and on not less than an annual basis with all existing Customers. Franchisee shall provide City with quarterly and annual written reports in a form acceptable to the City Manager and adequate to meet City's filing and reporting requirements ~~to the California Integrated Waste Management Board and to~~ with CalRecycle and the County of Orange~~.~~, including any associated with AB 939, AB 341, and AB 1826 throughout the Term of this Agreement. At City's request, Franchisee shall be responsible to prepare, or assist City with the preparation of, all reports and other information as may be required by any agency, including specifically, the State of California, in order to comply with any Applicable Laws related to the services contemplated by this Agreement.

11.2 ~~9.2~~Mutual Cooperation. City and Franchisee shall reasonably cooperate in good faith with all efforts by each other to meet City's ~~AB 939 diversion~~ Diversion and other compliance requirements imposed by AB 939, AB 341, AB 1826, and other Applicable Laws. In this regard, City's obligations shall include, without limitation, making such petitions, requests and applications as may be reasonably requested by Franchisee for time extensions in meeting Diversion goals, reductions in ~~diversion~~ Diversion goals, or other exceptions from the terms of AB 939 ~~(including, without limitation~~AB 341, ~~requests pursuant to Public Resources Code section 41785.)~~AB 1826, and other Applicable Laws.

11.3 ~~9.3~~Performance Requirements. Franchisee's obligations pursuant to the provisions of this Section shall include, but not be limited to, the following terms:

11.3.1 ~~9.3.1~~Indemnification Requirements. Franchisee agrees to defend, with counsel approved by City, indemnify, and hold harmless ~~City and City's officials, employees, and agents~~ the City Indemnitees from and against all fines and/or penalties and other liabilities which may be imposed by ~~the California Integrated Waste Management Board ("Board")~~ CalRecycle or any other regulatory agency if (1) Franchisee fails or refuses to timely provide information relating to its operations which is required pursuant to this Agreement or ~~AB 939~~ any Applicable Laws and such failure or refusal prevents or delays City from submitting reports required by ~~AB 939 in a timely manner~~Applicable Laws in a timely manner; or (2) the Source Reduction and Recycling goals, Diversion goals, program implementation requirements, or any other requirements of Applicable Laws are not met with respect to the Customers Franchisee services hereunder.

11.3.2 Assistance to City; Payment of Fees, Fines, and Penalties. In addition, Franchisee agrees, at its sole cost and expense, to:

(a) ~~9.3.2.1~~Assist City in responding to inquiries from ~~the Board~~CalRecycle;

(b) ~~9.3.2.2~~Assist City in preparing for, and participating in, ~~the Board's~~ CalRecycle's biennial review of City's ~~source reduction and recycling element pursuant to Public Resources Code Section 41825~~compliance with Applicable Laws;

(c) ~~9.3.2.3~~Assist City in applying for an extension ~~under Public Resources Code Section 41820~~, if so directed by City;

(d) ~~9.3.2.4~~Assist City in any hearing conducted by ~~the Board~~ CalRecycle relating to City's compliance with ~~AB 939~~Applicable Laws;

(e) ~~9.3.2.5Cooperate with~~ Assist City in the development and implementation of a public awareness and education program that is consistent with ~~the City's SRRE and HHWE, with costs borne as set forth in Section 9.1.2 above~~Applicable Laws, as well as any related requirements of ~~AB 939~~Applicable Laws;

(f) Provide City with advice on Recycling, Source Reduction, and other technical assistance related to compliance with the Applicable Laws;

(g) ~~9.3.2.6~~Defend, with counsel acceptable to City, ~~City and City's officials, employees, and agents~~ the City Indemnitees against the imposition of fines and/or penalties, or any other liabilities, issued ~~pursuant to AB 939~~by CalRecycle as a result of Franchisee's failure to comply with Applicable Laws, including, without limitation, AB 939, AB 341, and AB 1826; and

(h) Be responsible for and pay, any fees, penalties or other costs imposed against City by CalRecyle and Indemnify and hold harmless City against any fines, penalties, or other liabilities, levied against it for violation of ~~AB 939's diversion~~ any state-mandated Diversion requirements, or violation of any other provision of ~~AB 939~~Applicable Laws; provided, however, Franchisee's obligation to indemnify City for ~~AB 939~~ any penalties or fines set forth in this sub-paragraph shall be in proportion to the amount of such fines or penalties imposed because of Franchisee's delay or failure to perform ~~hereunder.~~its obligations hereunder.

11.4 Annual Compliance Review. City intends to review Franchisee's performance annually at its expense to ensure compliance with the terms and provisions of this Agreement ("Annual Compliance Review"). At a minimum, City intends to have internal staff or outside consultants review Franchisee's performance to ensure ongoing compliance with the terms hereof, including, but not limited to, the payment of required fees, performance of the Solid Waste Handling Services stated herein, implementation of programs required under the Agreement, Franchisee's maintenance and upkeep of records, and Franchisee's compliance with all Applicable Laws. Franchisee shall provide any and all information reasonably requested by City in connection with its efforts to ensure compliance with the terms hereof, regardless of whether such information is specifically otherwise called out herein as an item that Franchisee is required to maintain and provide to City.

~~9.4 Franchisee's Good Faith Efforts.~~

~~9.4.1 Evaluation by City. The City shall evaluate Franchisee's ongoing good faith efforts to assist the City in complying with AB 939. The determination as to whether Franchisee is demonstrating a good faith effort shall rest in City's sole discretion. "Good faith effort" for purposes of this Agreement means all reasonable and feasible efforts by Franchisee to implement the City's SRRE, and otherwise meet the requirements of AB 939. In determining Franchisee's "good faith" efforts the City will take into account the following factors:~~

9.4.2 Extraordinary Customer education efforts by Franchisee, (e.g., sponsorship and promotion of waste reduction workshops for their Customers, development and distribution of written materials promoting waste reduction and recycling), and which exceed the minimum public education assistance requirements of this contract.

9.4.3 Franchisee's demonstration of efforts to seek and maximize feasible and economical Source Reduction and recycling opportunities among its Customers, taking into account existing economic market conditions which affect the value and economic feasibility of recycling specific waste materials.

9.4.4 The extent to which Franchisee has utilized recovery facilities or other non-disposal facilities instead of landfills for disposal of solid waste.

9.5Failure to Exercise Good Faith Effort. Franchisee's failure to meet AB 939's diversion goal will not necessarily result in the automatic termination of this Agreement, provided City determines, in its discretion, that Franchisee has made a good faith effort to achieve such diversion goal. Nevertheless, and notwithstanding any provision herein to the contrary, a material breach of this Agreement shall be deemed to have occurred should: (1) City be assessed any fine or penalty by the Board which results from or relates to Franchisee's performance under this Agreement, or (2) City determines Franchisee is not making a good faith effort to ensure City complies with the provisions of AB 939.

SECTION 12SECTION 10
FRANCHISEE'S BOOKS AND RECORDS; FRANCHISEE'S BOOKS AND RECORDS: AUDITS

12.1 10.1Examination of Records. Franchisee shall maintain all records relating to the services Solid Waste Handling Services provided hereunder, including but not limited to Customer lists, billing records, accounts payable records, maps, service requests, cash receipts records, AB 939 compliance records, and other documents and materials which reasonably relate to Franchisee's compliance with and performance of the provisions of this Agreement (the "Records"), for the full Term of this Agreement, and an additional period thereafter of not less than three (3) years, or any longer period required by law. City shall have the right, upon five (5) business days advance notice, to inspect the Records. Such Records shall be made available to City at Franchisee's regular place of business, but in no event outside the County of Orange.

10.2 Annual Audited Financial Reports. At least annually, the Franchisee shall provide the City with an audited financial report to demonstrate that the Franchisee has fully paid the Franchise Fee for the preceding year. The financial report shall focus on the following areas:

(a) Verification of Franchisee's overall gross receipts, and verification of Franchisee's overall costs related to Landfills and Processing Facilities, for Solid Waste Handling Services within the City Limits.

~~(b) Verification of overall total disposal and recycling tonnage by Landfills and Processing Facilities of Solid Waste collected by Franchisee within the City Limits.~~

~~(c) Verification that for each quarterly report that the information was true and accurate based on audited data.~~

~~The City desires to ensure accurate reporting of weights of disposed and diverted Solid Waste. The Annual Audited Financial Report shall therefore include at a minimum an audit of weights of disposed and diverted Solid Waste for one month each quarter. If any one of the audit months is found to be inconsistent with Franchisee's records or to contain errors or to create concerns with reporting, then all months shall be so audited.~~

~~The Annual Audited Financial Report shall be prepared by an independent accounting firm in accordance with generally accepted accounting principles. The Annual Audited Financial Report shall be delivered to the City Manager no later than February 14th, unless the Franchisee is given prior written approval for a different deadline.~~

12.2 CERCLA Defense Records. City views the ability to defend against CERCLA and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for disposal, as well as where it was not taken, to be matters of concern. Franchisee shall maintain data retention and preservation systems which can establish where Solid Waste Collected in the City was landfilled (and therefore establish where it was not landfilled) for not less than five (5) years following the termination of this Agreement, and agrees to notify City's Risk Manager, City Clerk and City Attorney before destroying such records thereafter. At any time, including after the expiration of the Term hereof, Franchisee shall provide copies of such records to City. The requirements of this Section shall survive the expiration of the Term of this Agreement.

12.3 ~~10.3Audits by City. City shall have the right~~ Audits by City. City shall have the right to conduct or to contract with an independent auditing firm to perform an audit, at City's expense, of Franchisee's records (the "City Audit") to ensure compliance with the provisions of this Agreement on an annual and/or as-needed basis, to be determined by the City. The City Audit shall include, without limitation, a review of Franchisee's cash receipts records, ~~solid waste~~ Solid Waste tonnage ~~collection~~Collection, ~~diversion~~Diversion, and other related records, as well as those of each of its parent, subsidiary and/or ~~affiliate~~ affiliated companies, as appropriate, to determine Franchisee's Gross Receipts, the accuracy of Franchise Fees paid, and such other information as is reasonably deemed appropriate by the City Manager to evaluate Franchisee's performance hereunder. As part of the City Audit Franchisee's Customer's accounts and related records may be subject to review. While Franchisee will not be required to submit detailed account records, such as the names and addresses of Customers, to the City in connection with required reports hereunder, Franchisee shall make such records and information available for review in connection with the City Audit at Franchisee's business offices. ~~The auditor that perforins the City Audit will not use Customer names, addresses, or telephone numbers in any reports or other documents prepared and submitted to the City. The City will require as part of its auditor's contract that such~~

~~auditors agree to conflict of interest and confidentiality standards aimed at ensuring Franchisee's right to conduct business pursuant hereto is not impaired, and forbidding such auditors from recommending any solid waste enterprise over another to any City business.~~

Should any City Audit reveal an underpayment of any Franchise Fee required pursuant to this Agreement, the amount of such underpayment shall become due and payable to City not later than fifteen (15) days after written notice of such underpayment is sent to Franchisee by City, complete with any additional late charges as set forth herein. If a City Audit reveals inaccuracies or inconsistencies in more than five percent (5%) of all Customer accounts, either with Franchisee's operations or billing systems, or an underpayment of Franchise Fees of more than three percent (3%), Franchisee shall bear the entire cost of such City Audit and shall pay a sum necessary to cover such costs to the City within thirty (30) days of demand.

12.4 ~~10.4~~Inspection. ~~The~~ City shall have the right to inspect ~~the~~ Franchisee's books and records related to the Franchisee's performance under this Agreement. The inspections shall be allowed at any time during normal business hours, but ~~the~~ City shall provide at least two (2) days advance written notice before City commences an inspection of ~~the~~ Franchisee's books and records. Among other things, ~~the~~ City shall be allowed to review ~~the~~ Franchisee's contracts with its Customers, and shall be allowed to communicate directly with Franchisee's Customers, for the purpose of determining whether ~~the~~ Franchisee is in compliance with this Agreement. City shall not reveal any trade secrets or proprietary information obtained during their review of ~~the~~ Franchisee's books and records.

SECTION 13~~SECTION 11~~
RULES AND REGULATIONS OF CITY MANAGER

The City Manager shall have the power to establish rules and regulations respecting the accumulation, Collection and transportation of Solid Waste ~~Handling Services, provided they augment and are~~ not inconsistent with the provisions of this Agreement, providing such rules and regulations are found to be reasonably necessary by the City Manager for enforcement of the provisions of this Agreement, or any and all applicable laws and ordinances, and for the preservation of the public peace, health and safety. Franchisee agrees to comply with any and all such rules and regulations.

SECTION 14~~SECTION 12~~
INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE

14.1 ~~12.1~~Indemnification of City.

~~12.1.1General Indemnification. Without regard to the limits of any insurance coverage or requirements, Franchisee agrees to and shall indemnify, defend (with counsel acceptable to City), protect, and hold harmless City and its officers, agents, and employees from and against any and all loss, liability, penalties, claims, notices, demands, actions, or suits of every kind and description ("Claims") arising, alleged to arise, or in any way resulting from Franchisee's performance hereunder, including without limitation: (i) the operations of Franchisee, its agents, employees, and/or subcontractors; and (ii) the failure of~~

~~Franchisee, its agents, employees, and/or subcontractors to comply in any respect with the provisions and requirements of this Agreement, including without limitation Franchisee's obligation to (a) assure that City meets the statutory requirements of AB 939, and/or any amendments thereto, and (b) assure that City complies with the requirements of the County Agreement. Franchisee's obligations pursuant to this Section shall apply to any and all Claims in any legal proceedings (whether judicial, quasi-judicial, administrative or legislative in nature) brought against City, its officers and/or employees, except those attributable to the sole negligence or willful misconduct of City, and shall survive the termination or expiration of this Agreement.~~

14.1.1 General Indemnification.

(a) Franchisee hereby agrees to and shall indemnify and hold harmless the City Indemnitees from and against any and all loss, liability, penalty, forfeiture, claim, demand, action, proceeding or suit in law or equity of any and every kind and description (including, but not limited to, injury to and death of any person and damage to property, or for contribution or indemnity claimed by third parties) arising out of, resulting from, and/or in any way connected with this Agreement including: (1) the negligence or willful misconduct of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement; (2) the failure of Franchisee, its officers, employees, agents, and/or subcontractors to comply in all respects with the provisions of this Agreement (including without limitation Franchisee's obligation to ensure City complies with the requirements of the County Agreement), all Applicable Laws (including, without limitation, the Environmental Laws), ordinances and regulations, and/or applicable permits and licenses; (3) the acts of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement for which strict liability is imposed by law (including, without limitation, the Environmental Laws); and (4) any challenge to the award of, or any provisions of this Agreement (including any claim that the application of any provision hereof violates any provision of the California Constitution). The foregoing indemnity and hold harmless provisions shall apply regardless of whether such loss, liability, penalty, forfeiture, claim, demand, action, proceeding, suit, injury, death or damage is also caused in part by any of City Indemnitees' negligence, but shall not extend to matters resulting from the City Indemnitees' sole negligence, or willful misconduct. Franchisee further agrees to and shall, upon demand of City, at Franchisee's sole cost and expense, defend (with attorneys acceptable to City) the City Indemnitees against any claims, actions, suits in law or equity or other proceedings, whether judicial, quasi-judicial or administrative in nature, arising or resulting from any of the aforementioned events, and to reimburse City for any and all costs and expenses City incurs in providing any such defense, either before, during or after the time Franchisee elects to provide such defense, including any and all costs incurred in overseeing any defense to be provided herein by Franchisee. Franchisee shall receive credit towards this indemnity obligation for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City

(b) Franchisee, upon demand of City, made by and through the City Attorney, shall protect City and appear in and defend the City Indemnitees in any claims or actions by third parties, whether judicial, administrative or otherwise, including, but not limited to disputes and litigation over the definitions of "Solid Waste" or "Recyclable Material," the scope of the rights granted herein, conflicts between the rights granted herein and rights asserted by other

Persons, or the limits of City's authority with respect to the grant of licenses, or agreements, exclusive or otherwise, asserting rights under the Dormant Commerce Clause or any other federal or state laws to provide Collection services in the City.

(c) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the expiration or earlier termination of this Agreement.

14.1.2 ~~12.1.2~~Hazardous Substances Indemnification.

(a) ~~12.1.2.1~~Without regard to any insurance coverage or requirements (but giving credit to Franchisee for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City), and without limiting the above general indemnification obligation in any way, Franchisee specifically agrees to and shall, to the maximum extent permitted by law, defend (with counsel acceptable to City) reimburse, indemnify, and hold ~~City and its past and present officers, council members, employees, consultants and agents (hereinafter "Indemnified Parties")~~ the City Indemnitees harmless from and against any and all claims, actions, liabilities, damages, demands, judgments, losses, costs, liens, expenses, suits, actions, attorneys' fees, consultant fees, penalties and any and all other losses, damages, fees and expenses of whatever kind or nature ("Claims") (including but not limited to response costs, investigative costs, assessment costs, monitoring costs, treatment costs, cleanup costs, removal costs, remediation costs, and similar costs, damages and expenses) that arise out of or are alleged to arise out of or in any way relate to any action, inaction or omission of Franchisee that:

(i) ~~(a)~~results in any demand, claim, notice, order, or lawsuit, asserting that any ~~Indemnified Party~~ of the Indemnitees is liable, responsible or in ~~anyway~~ any way obligated to investigate, assess, monitor, study, test, treat, remove, remediate, or otherwise cleanup, any Hazardous Contaminant (as defined herein); or

(ii) ~~(b)~~relates to material ~~collected~~Collected, transported, ~~recycled~~Recycled, treated or disposed of by Franchisee.

(b) ~~12.1.2.2~~Franchisee's obligations pursuant to this Section shall apply, without limitation, to:

(i) ~~(a)~~any Claims brought pursuant to or based on the provisions of ~~the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq., the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 9601 et seq.~~CERCLA, RCRA, the California Hazardous Substances Account Act (California Health & Safety Code Sections 25300 et seq.), the California Hazardous Waste Control Laws (California Health and Safety Code Sections 25100 et seq.), the California Porter-Cologne Act (California Water Code Section 13000 et seq.), and any and all amendments and regulations thereto, and any other Federal, State, regional or local environmental statutory or regulatory provision;

(ii) ~~(b)~~any Claims based on or arising out of or alleged to be arising out of the ownership, use, lease, sale, design, construction, maintenance or operation ~~of~~ by Franchisee of any facility;

(iii) ~~(c)~~any Claims based on or arising out of or alleged to be arising out of the marketing, sale, distribution, storage, transportation, disposal, processing or use of any materials recovered by Franchisee;

(iv) ~~(d)~~any Claims based on or arising out of or alleged to be arising out of any breach of any express or implied warranty, representation or covenant arising out of or in connection with this Agreement.

14.1.3 Additional Indemnification Requirements.

(a) ~~12.1.3~~The ~~foregoing~~ indemnity and defense obligations in this Section 14 shall apply irrespective of the negligence or willful misconduct of Franchisee or any affiliate of Franchisee.

~~12.1.4For purposes of this Section, the term "Hazardous Contaminant" shall mean any "hazardous material," as that term is defined under California Health & Safety Code Section 25501(1); any "hazardous substance," as that term is defined under California Health & Safety Code Sections 25281(f), 25501(e), 25501.1 and under Title 42, Section 9601(14) of the United States Code; any "hazardous waste," as that term is defined under Title 42, Section 6093(5) of the United States Code and under California Health & Safety Code Section 25550(m); any chemical which the Governor has identified as a chemical known to the State to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term "Hazardous Contaminant" shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.~~

(b) ~~12.1.5~~The provisions of this Section shall not terminate or expire~~.~~, shall be given the broadest possible interpretation, and shall survive the termination or expiration of this Agreement.

(c) ~~Faithful Performance Bond. Franchisee shall furnish to City and shall pay for a performance bond for the faithful performance of Franchisee's obligations under this Agreement. The form of the bond shall be approved by the City Attorney and shall include a provision for the surety company to send notice to the City of any action taken concerning the bond. Such bond shall be executed by a surety company licensed to do business in the State of California and shall be in the penal sum of Thirty Thousand Dollars ($30,000). The terms of the bond shall be such that if Franchisee shall well and truly perform the covenants, promises, undertakings and obligations contracted by Franchisee~~ With regard to any claim covered by this provision arising from the delivery of Solid Waste to the Orange County landfill system pursuant to the terms of the County Agreement, the indemnity provisions hereof are intended to be supplemental to any indemnification obligations owed to the City by the County of Orange pursuant to the County Agreement.

14.2 Surety. Contemporaneously with execution of this Agreement, as security for Franchisee's faithful performance of all obligations of this Agreement, Franchisee shall provide a surety mechanism (the "Surety") as more fully defined below in the amount of Ten Thousand Dollars ($10,000). The Surety may be comprised of either a performance bond or an irrevocable letter of credit, or a combination of both. If a letter of credit is utilized to satisfy some or all of the Surety requirements, it shall be drawn upon a financial institution with an office within fifty (50) miles of City, and otherwise in a form acceptable to the City Attorney. The performance bond, if any, shall be issued by a duly authorized corporate surety company authorized to do business in California, and in a form acceptable to the City Attorney. The cost of the Surety shall be the sole responsibility of Franchisee. The Surety shall be released within ninety (90) days after both (i) the expiration of the Term of this Agreement, and (ii) Franchisee's satisfactory performance of all obligations hereunder.

14.3 ~~12.2~~Forfeiture of Surety. In the event Franchisee shall for any reason become unable, or fail in any way, to perform as required by this Agreement, City may declare a portion or all of the Surety, as may be necessary to recompense and make whole the City, forfeited to the City. Upon partial or full forfeiture of the Surety, Franchisee shall restore the Surety to its original amount within thirty (30) days of the City's notice to do so. Failure to restore the Surety to its full amount within thirty (30) days shall be ~~to be performed under this Agreement, then the obligation of said bond shall be void; otherwise it shall remain in full force and effect. Said bond shall terminate and be cancelled 90 days following the termination date of this Agreement. City shall execute and deliver to Franchisee or such surety company promptly after the 90th day following the termination of this Agreement such certificates or other documents as either of them may reasonably request for the purpose of terminating and canceling such bond.~~a material breach of this Agreement.

14.4 Use of Surety by City. Notwithstanding any provision hereof to the contrary, thirty (30) days following City providing Franchisee with written notice of its failure to pay City any amount owing under this Agreement, either the letter of credit or performance bond comprising the Surety may be utilized by City for purposes including, but not limited to: (1) payment of sums due under the terms of this Agreement which Franchisee has failed to timely pay to City, including specifically liquidated damages; and (2) reimbursement of costs borne by City to correct violations of this Agreement not corrected by Franchisee.

14.5 Replacement Letter of Credit. City may draw upon the entire letter of credit (if any) utilized to meet Franchisee's obligations pertaining to the Surety, and convert it to a cash deposit, if Franchisee fails to cause the letter of credit to be extended or replaced with another satisfactory letter of credit no later than sixty (60) days prior to its expiration.

14.6 ~~12.3~~Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement ~~insurance against claims for death or injuries to persons, damages to property, and economic loss~~ the following types of insurance and shall maintain the following minimum levels of coverage, which shall apply to any claims which may arise from or in connection with ~~Franchisee'~~ Franchisee's performance hereunder or the actions or inactions of any of Franchisee's officers, agents, representatives, employees, or subcontractors in connection with Franchisee's performance. The insurance requirements

hereunder in no way limit Franchisee's various defense and indemnification obligations or any other obligations as set forth herein.

12.3.1 Scope of Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement, the following insurance coverages:

Worker's Compensation Insurance. 12.3.1.1Worker's Compensation insurance to cover Franchisee's employees as required by tire California Labor Code. Prior to City execution of this Agreement, but not later than ten (10) business days following City Council approval of the contract, unless a waiver of this timing requirement is granted by City, Franchisee shall file with City a signed Worker's Compensation Insurance Certification in substantially the following form:
"I am aware of, and will comply with Divisions 4 and 5 of the California Labor Code by securing, paying for, and maintaining in full force and effect for the duration of this Agreement, complete worker's compensation insurance, and shall furnish a certificate of insurance to the City before commencement of work under this Agreement."

12.3.1.2 Comprehensive General Liability Insurance. Comprehensive General Liability insurance covering death and personal injury and property damage liability, automobile liability (both owned and leased) contractual liability, and independent contractor's liability, with minimum aggregate coverage of Three Million Dollars ($3,000,000) per occurrence, and a combined single limit of Three Million Dollars ($3,000,000) per occurrence for automobile liability.

12.3.1.3 Each such Policy of Insurance shall:

(a) Be issued by a company that holds a current policy holder's alphabetic and financial size category rating of not less than A VIII, according to the current Best's Key Rating Guide, or a company of equal financial stability that is approved by the City Manager for all coverages except surety.

(b) Cover the operations of Franchisee pursuant to the terms of the Agreement.

(c) Be written on an occurrence and not a claims-made basis.

12.3.1.4 The general liability and automobile liability policies required hereunder shall contain, or be endorsed to contain, the following provisions:

(a) City, its employees, agents, contractors, officials, volunteers, and officers are to be covered as named insureds as respects: liability arising out of activities performed by or on behalf of Franchisee; products

~~and completed operations of Franchisee; premises owned, occupied, or used by Franchisee; and automobiles owned, leased, hired or borrowed by Franchisee. The coverage shall contain no special limitations on the scope of protection afforded to City or its officials, employees, agents, contractors, and volunteers.~~

~~(b) This policy shall be considered primary insurance as respects City, its officials, employees, agents, contractors and volunteers. Any insurance or self-insurance maintained by City and its officials, employees, agents, contractors, and volunteers shall be in excess of Franchisee's insurance and shall not contribute with it.~~

~~(c) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City or its officials, employees, agents, contractors, or volunteers.~~

~~(d) Franchisee's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.~~

~~(e) Thirty (30) days prior written notice by certified mail, return receipt requested, shall be given to City prior to any suspension, cancellation, reduction in scope or limits of coverage, or non-renewal of this policy, for any reason whatsoever, becoming effective. Such notice shall be sent to the City Clerk.~~

~~12.3.2 Adjustments to Coverage. The types and limits of coverage shall be subject to review and approval by the City Manager every year. City may require that the coverage types or amounts, or companies of insurance, be increased or changed at that time such that they are at least equal to the quality, types, and amounts of coverage provided by City's own liability insurance, or any self-insurance or risk sharing pool City may have or participate in,~~

~~12.3.3 Deductibles and Self-Insured Retention. Any deductible or self-insured retention amount must be declared to and approved by the City Manager.~~

14.6.1 Comprehensive General Liability. Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01 including completed operations and contractual liability, with limits of liability of not less than Two Million Dollars ($2,000,000) per occurrence and Four Million Dollars ($4,000,000) annual aggregate for liability arising out of Franchisee's performance of this Agreement. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set forth above. If written with an aggregate, the aggregate shall be double the occurrence limit. Such insurance shall be endorsed to:

(a) Name the City of Irvine and its employees, representatives, officers, officials, agents, representatives, and volunteers (collectively hereinafter "City and City

Personnel") as additional insured for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.2 Automobile Liability Insurance. Insurance with a limit of liability of not less than Two Million Dollars ($2,000,000) each occurrence and Two Million Dollars ($2,000,000) annual aggregate. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set above. Such insurance shall include coverage for all "owned," "hired" and "non-owned" vehicles, or coverage for "any auto." Such insurance shall be endorsed to:

(a) Name the City and City Personnel as additional insureds for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.3 Workers' Compensation Insurance.

(a) In accordance with the Labor Code of California and covering all employees of Franchisee providing any service in the performance of this agreement. Such insurance shall be endorsed to waive the insurer's right of subrogation against the City and City Personnel with respect to the performance of Franchisee's obligations under this Agreement.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement unless your insurance carrier is the State of California Insurance Fund (SCIF) and the endorsement numbers 2570 and 2065 are referenced on the certificate of insurance.

Franchisee's completion of the form attached hereto as Exhibit B shall be a condition precedent to Franchisee's rights under this Agreement. Should Franchisee certify, pursuant to Exhibit B, that, in the performance of the work under this Agreement, it shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, Franchisee shall nonetheless maintain responsibility for requiring that any subcontractors performing work under this Agreement have and maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the work performed under this Agreement.

14.6.4 Environmental Pollution Control Insurance. Franchisee shall maintain either an endorsement to its general liability policy, or a separate policy of insurance covering environmental pollution and contamination that names the City and City Personnel as an additional insured. Said coverage shall be in the amount of not less than One Million Dollars ($1,000,000)

per occurrence, and Two Million Dollars ($2,000,000) in the aggregate, and shall substantially comply with all other provisions set forth in Section 14.6.1.

14.6.5 Endorsements. A statement on an insurance certificate will not be accepted in lieu of the actual endorsement. Insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to City for approval.

Additional Insured Endorsements shall not:

(1) Be limited to "Ongoing Operations"

(2) Exclude "Contractual Liability"

(3) Restrict coverage to the "Sole" liability of Franchisee

(4) Contain any other exclusion contrary to the Agreement.

Any Deductible and/or Self-Insured Retentions must be disclosed to City.

14.6.6 Acceptability of Insurers. Each policy shall be from a company with current A.M. Best's rating of A VII or higher and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus lines brokers under applicable provisions of the California Insurance Code or any federal law. Any other rating must be approved in writing by the City.

14.6.7 Insurance of Subcontractors. Franchisee shall be responsible for causing subcontractors to maintain the same types and limits of coverage in compliance with this Agreement, including naming the City and City Personnel as additional insureds to the subcontractor's policies.

14.6.8 ~~12.3.4~~Verification of Coverage. Franchisee shall furnish City with certificates of insurance and with original endorsements ~~effecting~~ affecting coverage required by this ~~Section prior to commencement of services provided hereunder~~Article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to ~~issue binding~~ bind coverage on its behalf. The certificates and endorsements are to be on forms ~~approved by City. All certificates, letters, and endorsements~~ provided by or acceptable to City and are to be received and approved by City before work commences. ~~City reserves the right to require complete, certified copies of all required insurance policies, at any time.~~

~~12.3.5 Subcontractors. In the event City provides its written consent for the use of subcontractors, Franchisee shall include any such permitted subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor, All coverage for subcontractors shall be subject to all of the requirements stated herein. .~~

14.6.9 ~~12.3.6~~Loss or Reduction in Insurance. In the event that Franchisee fails to retain or maintain insurance with the scope and amounts of coverage required hereunder, City shall have the right, but not the obligation~~.~~, to either terminate this Agreement, or ~~to~~ obtain

insurance coverage as required herein on behalf of Franchisee and utilize funds from the ~~Performance Bond~~ Surety defined in this Section 14 to pay the cost of providing such coverage.

SECTION 15~~SECTION 13~~
CITY'S REMEDIES~~:~~ ; DEFAULT AND TERMINATION

15.1 ~~13.1~~City's Right to Suspend or Terminate. The City shall have the right to suspend or terminate this Agreement, and the ~~non-exclusive~~ nonexclusive franchise granted herein, upon Franchisee's breach of any of its obligations hereunder.

15.2 ~~13.2~~Notice of Default. If the City Manager determines that Franchisee~~'s~~ has defaulted in the performance of any obligation hereunder, or that Franchisee's performance pursuant to this Agreement with respect to such matters has not been in conformity with ~~this Agreement~~reasonable industry standards which are obtained in similar cities in Southern California, the provisions of this Agreement, the requirements of the Municipal Code, the requirements of CalRecycle, including, but not limited to, requirements for Source Reduction and Recycling or any other applicable federal, state, or local law or regulation, including but not limited to the laws governing transfer, storage, or disposal of Special Wastes, or Hazardous Substances (to the extent applicable to Franchisee, and/or Franchisee's activities under this Agreement), the City Manager may provide written notice to Franchisee of ~~any specific deficiencies~~such default. The City Manager may, in such written notice, set a reasonable time within which correction of ~~deficiencies is to~~ such default shall be made. Unless a longer or shorter time is otherwise specified by the City Manager, a reasonable time for correction shall be ~~30~~ thirty (30) days from the date such written notice is given.

15.3 ~~13.3~~Termination Without Right to Cure. City shall have the right of suspension or termination as a result of Franchisee's failure to timely cure any deficiency as set forth above, which right is in addition to City's right to terminate this Agreement without affording Franchisee an opportunity to cure in circumstances where Franchisee is determined to have materially breached this Agreement. Notwithstanding anything to the contrary in Section 15.2 above, City shall thus be afforded the right to terminate this Agreement without affording the right to cure in the event of any material breach hereof by Franchisee, including without limitation any action, inaction or circumstance defined herein as a material breach, and/or under any of the following circumstances which are hereby defined as material breaches:

(a) ~~13.3.1~~If Franchisee practices, or attempts to practice, any fraud upon City.

(b) ~~13.3.2~~If Franchisee becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Franchisee in a bankruptcy proceeding.

(c) ~~13.3.3~~If Franchisee willfully violates any orders or rulings of any regulatory body other than City having jurisdiction over Franchisee relative to this Agreement. So long as City's rights are not prejudiced during the pendency of any challenge to such orders or rulings by Franchisee, Franchisee may contest any such orders or rulings by appropriate proceedings conducted in good faith, in which case no material breach of this Agreement shall be deemed to have occurred until a final ruling has been rendered.

(d) ~~13.3.4~~If Franchisee fails to meet the ~~waste diversion~~ Diversion requirements of this Agreement or ~~AB 939 and otherwise fails to demonstrate good faith efforts to meet those requirements.~~pursuant to Applicable Laws.

(e) If Franchisee fails to materially comply with any insurance or indemnification requirement set forth in this Agreement; provided, however, that Franchisee shall have a reasonable opportunity to cure any default relating to the Franchisee's failure to provide the City with proof of insurance, so long as such insurance is in effect at all times.

(f) If City is required to pay any fine or penalty, which Franchisee is required by the terms hereof to pay, yet which Franchisee fails, refuses, neglects or is unable to timely pay.

(g) If Franchisee, or any management level employee of Franchisee is convicted of a "Criminal Matter" (as defined herein). For purposes of this Section the term "Criminal Matter" refers to any felony or misdemeanor offense having any relationship to either Solid Waste Handling Services or public corruption (including, without limitation, bribery, conflict of interest related allegations, vote selling, or any similar type charges).

15.4 ~~13.4~~Termination Procedure. The following procedure shall apply to either of the following:

(a) any action or inaction by Franchisee which is a material breach of this Agreement, not requiring that Franchisee be afforded the right to cure, or

(b) any circumstance in which Franchisee fails to correct, to the satisfaction of the City Manager, all deficiencies contained in a written notice of default within the specified time (or if it is not reasonably possible to correct such deficiencies within the specified time, and Franchisee fails to commence to correct or remedy such deficiencies within the specified time and diligently effect such correction or remedy thereafter).

In the event of either of the above, then the City Manager shall either refer the matter to the City Council for review, or review the matter himself or herself and upon completion of such review notify Franchisee of the City Manager's decision, in writing.

15.4.2 ~~13.4.2~~City Manager Review. If the City Manager reviews the matter and determines that Franchisee has failed to properly or adequately perform as set forth above, the City Manager, in the exercise of his or her sole discretion, may terminate ~~the~~ this Agreement, or take such other action as he or she deems appropriate to pursue any remedy available to City. A decision or order of the City Manager shall be final and binding on Franchisee unless Franchisee files a "Notice of Appeal" with the City Clerk within five (5) days of the date the notice of the City Manager's decision is given. The City Manager shall schedule any appeal for consideration by the City Council at the earliest feasible Council Meeting following the date a Notice of Appeal is given to City.

15.4.3 ~~13.4.3~~City Council Review. In the event an appeal of a decision of the City Manager is filed, or if the City Manager refers the matter directly to the City Council upon Franchisee's failure to cure a default, the City Council shall set the matter for consideration as a regular agenda item, and the matter shall not require a public hearing. In reviewing the matter the

City Council may consider any information reported by the City Manager regarding the deficiencies, and shall give Franchisee, or its representatives and any other interested person, a reasonable opportunity to be heard. The Council shall determine, in the exercise of its absolute and sole discretion, whether Franchisee has failed to properly or adequately perform as set forth above, and if so whether to terminate the Agreement, or take such other action as it deems appropriate to pursue any remedy available to City. The decision of the City Council shall be final.

15.4.4 ~~13.4.4~~Performance During Reviews. Franchisee's performance under this Agreement is not excused, nor shall its rights to operate hereunder be impacted, during any period of time when its performance is under review as set forth above, including at any time prior to a final decision as to whether such performance is deficient.

15.5 ~~13.5~~Franchisee's Obligations Upon Termination. In the event this Agreement is terminated pursuant to this Section ~~13~~ 15 or the Term of this Agreement expires:

(a) Franchisee shall have no right or authority to engage in Solid Waste Handling Services within the City Limits under this Agreement.

(b) Franchisee shall remain liable to City for any and all fees that would otherwise be payable by Franchisee, including specifically amounts resulting from the late payment of Franchise Fees.

(c) Franchisee shall allow its Customers to arrange for Solid Waste Handling Services with a Solid Waste enterprise collector authorized to perform such services, without penalty or liability for breach of contract.

(d) Franchisee shall remove all of its Bins used in performance of Solid Waste Handling Services hereunder from the Premises of all Customers, and shall properly dispose of all Solid Waste in such Bins, within such time period as specified by the City Manager. If Franchisee fails to remove its Bins and dispose of all Solid Waste in such Bins as required pursuant to this Section 15.5 within the time periods prescribed, City shall have the right to take any of such actions that have not been performed by Franchisee. Franchisee shall promptly reimburse City for all sums expended by City in taking such actions, along with a ten percent (10%) administrative fee.

15.6 ~~13.6~~City's Remedies Cumulative. The rights and remedies of City set forth in any Section herein shall be in addition to any and all other rights and privileges City may have, and shall not be deemed to limit any such other rights or privileges of City under this Agreement or by virtue of any law.

SECTION 16~~SECTION 14~~
FRANCHISEE'S REMEDIES; ADMINISTRATIVE HEARING

16.1 ~~14.1~~Administrative Hearing. Should Franchisee contend that City is in breach of any aspect of this Agreement, it shall give notice to the City Manager requesting an administrative hearing on the allegation. The hearing shall occur as soon as reasonably possible, or on such date as mutually agreed by the parties, and shall be held before an impartial hearing officer to be determined by the City Manager. The hearing officer shall make an advisory ruling on Franchisee's allegations, and suggest a remedy if a breach by City

is determined to exist. The hearing officer's ruling and recommendations shall become final and binding if the Parties so agree in writing within 30 days of the date notice of the decision is given to the Parties. Otherwise, the hearing officer's ruling shall have no further force or effect.

16.2 ~~14.2~~Other Remedies; Claims. Franchisee shall be entitled to all available remedies in law or equity for City's breach of this Agreement; provided, however, Franchisee shall not file or otherwise commence any action against City, in law or equity, in any court, until after an administrative hearing as set forth above has been completed, and the above noted ~~30~~ thirty (30) day period to accept the hearing officer's decision has passed, or either City or Franchisee has given timely written notice to the other that it will not accept the hearing officer's decision.

16.3 ~~14.3~~Actions for Damages. As a prerequisite to the filing and maintenance of any action for damages by Franchisee against City arising out of or relating to this Agreement, Franchisee shall present a claim to City, as required by Government Code section 910 et seq., within ~~30~~ thirty (30) days of the date of the occurrence giving rise to the claim for damages.

SECTION 17~~SECTION 15~~
ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS

This Agreement shall not be sold, hypothecated, sublet, assigned, or otherwise transferred, nor shall any of the rights or privileges herein be hypothecated, leased, assigned, sold, or otherwise transferred, either in whole or in part, nor shall title thereto, either legal or equitable, or any right, interest, or property therein, pass to or vest in any person, except Franchisee, either by action or inaction of Franchisee or by operation of law, without the prior written consent of ~~the~~ City which may be withheld with or without cause. For purposes of permitting Franchisee to subcontract with other haulers to assist in providing services hereunder, and provided Franchisee will continue to provide services hereunder with its own employees, the written consent of the City Manager shall suffice. Any other transfer, sale, subcontract, hypothecation, assignment or lease shall require the written consent of the City Council as expressed by a Resolution. Any attempt by Franchisee to hypothecate, subcontract, lease, assign, sell, or otherwise transfer any right or interest in this Agreement without the written consent of City shall be null and void and shall give rise to City's right, but not obligation, to terminate this Agreement.

SECTION 18~~SECTION 16~~
GENERAL PROVISIONS

18.1 ~~16.1~~Force Majeure. Franchisee shall not be in default under this Agreement in the event that its ability to provide Solid Waste Handling Services in compliance with its obligation to do so hereunder is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, civil disturbances, insurrections, explosion, natural disasters such as floods, earthquakes, landslides, and fires, strikes, lockouts, and other labor disturbances or other catastrophic events which are beyond the reasonable control of Franchisee. The phrase "other catastrophic events" does not include the financial inability of Franchisee to perform or the failure of Franchisee to obtain any necessary permits or licenses

from other governmental agencies or the right to use the facilities of any public utility where such failure is due in substantial part to the acts or omissions of Franchisee.

18.2 ~~16.2~~Property Damage. Any physical damage caused by the negligent or willful acts or omissions of employees, agents, or subcontractors of Franchisee to private or public property shall be promptly repaired or replaced.

18.3 ~~16.3~~City's Authorized Agent. Excepting amendments hereto and such actions set forth herein specifically calling for City Council action or approval, the City Manager is authorized to take any action with regard to any matter, or enforce any right, set forth herein requiring action by ~~the~~ City.

18.4 ~~16.4~~Amendments. Except as otherwise expressly stated herein, no amendment of this Agreement shall be valid unless in writing duly executed by the Parties.

18.5 ~~16.5~~Independent Contractor. It is expressly understood and agreed that Franchisee shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Franchisee shall have the exclusive control over the details of the services and work performed hereunder and all persons performing the same; that Franchisee shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Franchisee. Neither Franchisee nor its officers, employees, agents or subcontractors shall obtain any rights to retirement benefits, workers' compensation benefits or any other benefits which accrue to City employees and Franchisee hereby expressly waives any claim it may have, or hereafter acquire, to such benefits.

18.6 ~~16.6~~Law to Govern; Venue. The laws of the State of California shall govern this Agreement. In the event of litigation between the parties, venue and jurisdiction shall lie exclusively in a state court of competent jurisdiction in Orange County, California. The parties agree to waive any potential claim to diversity jurisdiction under Title 28 U.S.C. § 1332 or any other statute, law or judicial authority which actually or colorably provides for federal jurisdiction. In the event of any legal proceeding this Agreement shall be interpreted as if jointly drafted by the Parties.

18.7 ~~16.7~~Successors and Assigns. The terms, covenants and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties.

18.8 ~~16.8~~Waiver. The waiver by either Party of any breach or violation of any term, covenant or condition of this Agreement shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach or violation of the same or of any other term, covenant or condition.

18.9 ~~16.9~~Notices. All notices, or other communications whatsoever which this Agreement contemplates or requires either Party to give to the other, shall, except as otherwise provided herein, be in writing and shall be personally delivered or sent by registered or

certified mail, postage prepaid, return receipt requested, addressed to the respective party as follows:

To City: City of Irvine
City Hall
1 Civic Center Plaza
Irvine, California 92714
Attn: City Manager

To Franchisee: _____
_____
_____
_____

~~Or~~ or to such other address as either ~~party~~ Party may from time to time designate by notice to the other given in accordance with this Section. ~~Such notice~~ Notice shall be deemed given on the date served if served personally ~~served or, if mailed,~~ between the hours of 8:00 a.m. to 5:00 p.m. on any regular business day for City's business offices. If mailed, notice shall be deemed given three (3) business days from the date ~~the~~ such notice is deposited in the United States mail in the manner proscribed above.

18.10 ~~16.10~~Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected unless their enforcement under the circumstances would be unreasonable, inequitable or would otherwise frustrate the purposes of this Agreement.

18.11 ~~16.11~~Attorneys' Fees and Litigation Costs. In the event either party brings any action or proceeding to enforce or interpret the terms or provisions of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable attorneys' fees and other litigation costs and expenses, including without limitation expert witness fees, consultant fees and costs, without regard to whether the matter proceeds to trial. Without limiting its scope in any way, this provision is expressly intended to, and shall, apply to fees and costs incurred in any appeal.

18.12 ~~16.12~~Corporate Resolution. Concurrent with the execution of this Agreement, Franchisee shall provide City with a corporate resolution of its Board of Directors demonstrating the authority for the undersigned to enter and lawfully bind Franchisee to this Agreement, or in the event Franchisee is not a Corporation, with such evidence of authority as required by the City Manager.

18.13 ~~16.13~~Integration. This Agreement contains the entire integrated agreement and understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, promises, proposals, and agreements between the Parties, whether written or oral. The Parties acknowledge this document has been executed with the consent and upon the advice of counsel. Each of the Parties acknowledges that no party or agent or attorney of any other party has made any promise, representation, or warranty, express or implied, not contained in this Agreement, to induce the other party to execute this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates indicated below.

CITY OF IRVINE
a California municipal corporation

APPROVED AS TO FORM:

_____
City Attorney

Date: _____

By: _____
~~Mayor~~City Manager

ATTEST:

Date: _____

By: _____
City Clerk

Franchisee _____

Date: _____

By: _____

Title: _____

EXHIBIT A

Village Commercial Premises Map

EXHIBIT B

Workers' Compensation Insurance Certification

Contract Services Description:_____

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

(CHECK ONE APPLICABLE BOX BELOW)

☐ **I have and will maintain workers' compensation insurance**, as required by Section 3700 of the Labor Code, for the performance of the work to be performed under this Agreement and shall submit insurance certificates evidencing such coverage as set forth herein.

☐ I certify that, in the performance of the work under this Agreement, **I shall not employ any person** in any manner so as to become subject to the workers' compensation laws of California, and I hereby agree to indemnify, defend, and hold harmless the City of Irvine and all of its officials, employees, and agents from and against any and all claims, liabilities, and losses relating to personal injury or death, economic losses, and property damage arising out of my failure to provide such worker's compensation insurance. I further agree that, **if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions and immediately furnish insurance certificates** evidencing such coverage as set forth herein.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Dated:	
Contracting Firm:	
Signature:	
Title:	
Address:	

7.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: SEPTEMBER 12, 2017

TITLE: TREASURER'S REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2017

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Receive and file the Treasurer's Report for the fiscal year ended June 30, 2017.

EXECUTIVE SUMMARY

This report provides a synopsis of investment activity for the City's three investment portfolios for the fiscal year ended June 30, 2017. The portfolios, managed by United American Capital Corporation (UACC) under the direction of the Treasurer, include the Irvine Pooled Investment Portfolio, Bond Proceeds Fund Portfolio, and the Special District Funds Portfolio. The total market value for all three portfolios was $982.03 million as of June 30, 2017.

This report provides information on assets, allocations, average maturities, yields, and valuations for each of the three portfolios. A discussion of market conditions is included to give additional perspective to these measurements.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its regular meeting of August 21, 2017, the Finance Commission unanimously voted to recommend that the City Council receive and file the Treasurer's Report.

ANALYSIS

The Treasurer's office is responsible for the investment of the City's three fixed income portfolios in conformance with the Investment Policy adopted annually by the City Council. In accordance with the Investment Policy, management of the Irvine Pooled Investment Portfolio, Bonds Proceeds Fund Portfolio and the Special District Funds Portfolio are delegated to a contract management firm, UACC, with full authority to execute investment transactions on behalf of the City. The Investment Policy is updated annually in accordance with the California State Government Code. Treasurer's reports are provided at quarter end and fiscal year end to the Investment Advisory Committee, Finance

Commission, and City Council. The report includes investment activity and performance for each of the City's portfolios. The primary objectives of investing public funds, in order of importance, are safety of principle, liquidity of funds, and return on investment. All securities owned by the City are held in safekeeping by a third party custodial bank acting as the agent for the City instead of being held by a securities dealer or investment management firm. Any trade executed with a broker/dealer is required to settle with the City's safekeeping agent on a delivery versus payment basis, where the delivery of a security to the appropriate party is made only after the funds have been sent in full as payment for the security.

Irvine Pooled Investment Portfolio

The Irvine Pooled Investment Portfolio contains funds invested for the daily operational requirements of the City and funds reserved for economic uncertainties, future rehabilitation and maintenance needs. The portfolio is a combination of various operational funds, including the City's Asset Management Plan and funds earmarked for the development of the Orange County Great Park. A summary of Pooled Investment Portfolio Book Value by Fund is presented at the end of this report (Attachment 1).

As of June 30, 2017, the book value (purchase price of securities as recorded on the City's books) of the portfolio was $637.21 million and the average weighted yield to maturity was 1.24 percent. Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the portfolio as of June 30, 2017 was $5.82 million. The following chart compares the portfolio's statistics over a rolling 12-month period.

Irvine Pooled Investment Portfolio
Rolling 12-Month Quarterly Comparison

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Book Value	$637,207,311	$599,028,736	$574,580,674	$557,660,462
Market Value	$634,768,340	$596,334,045	$571,366,011	$559,208,937
Unrealized Gain/(Loss)	($2,438,971)	($2,694,691)	($3,214,663)	$1,548,475
Unrealized Gain/(Loss) as % of Book Value	(0.38%)	(0.45%)	(0.56%)	0.28%
Average Yield To Maturity	1.24%	1.18%	1.12%	1.06%
Liquidity 0–6 months	14.32%	13.19%	13.56%	9.85%
Average Years To Maturity	1.91	1.98	2.03	2.02
Modified Duration (Years)	1.85	1.91	1.97	1.98
Fiscal Year to Date Income	$5,819,215	$4,137,190	$2,720,039	$1,340,988

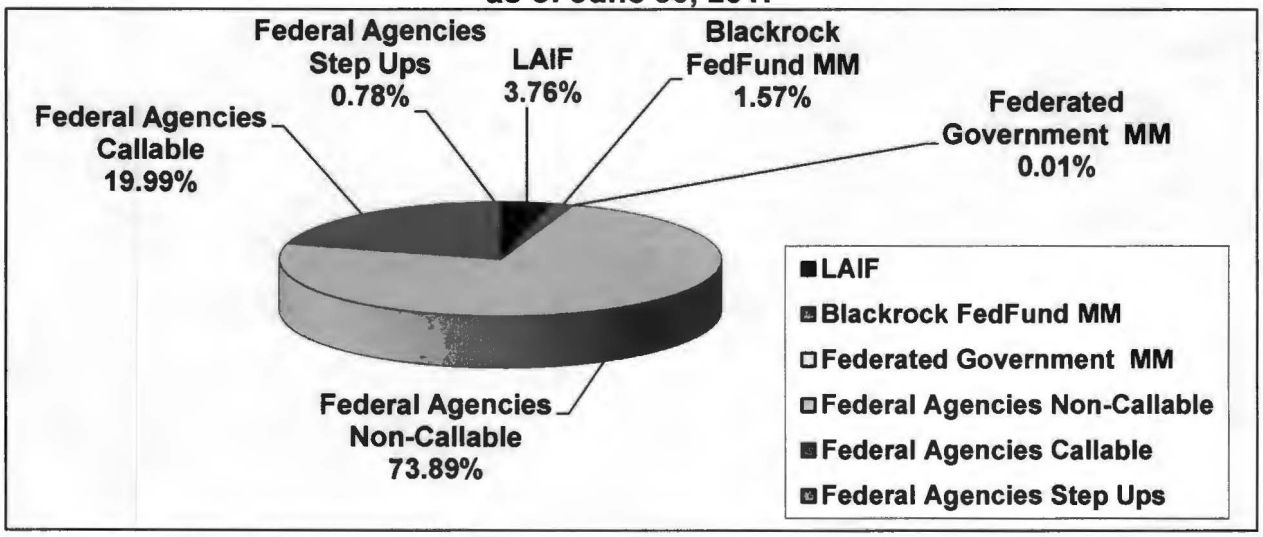
The Irvine Pooled Investment Portfolio's book value increased by $38.18 million from the previous quarter, primarily attributable to the collections of property tax, local park fees, and

transportation mitigation fees. Portfolio yield to maturity increased for the quarter ended June 30, 2017 by 6 basis points to 1.24 percent. This was directly attributed to the increasing rate environment as maturing investments were reinvested into longer dated higher rate securities. With market rates increasing during the quarter ending June 30, 2017, the portfolio ended the quarter with an unrealized loss of $2.44 million as compared to an unrealized loss of $2.69 million on March 31, 2017. This is a normal result of the portfolio's modified duration of 1.85 years, and its price-sensitivity to changes in market interest rates.

To ensure the safety of the portfolio, investments that hold the highest credit quality are selected. The Irvine Pooled Investment Portfolio is comprised primarily of Federal Government sponsored entity debt, otherwise known as federal agency securities. Although federal agency securities were downgraded by Standard & Poor's to AA+ in August 2011, they continue to be regarded as among the safest securities in the global market. Two of the government sponsored agencies, Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Company (Freddie Mac), remain under conservatorship and carry an implicit guarantee by the Federal Government. In addition, both are carefully monitored by the City's investment manager and Treasurer to ensure the continued safety of the City's funds.

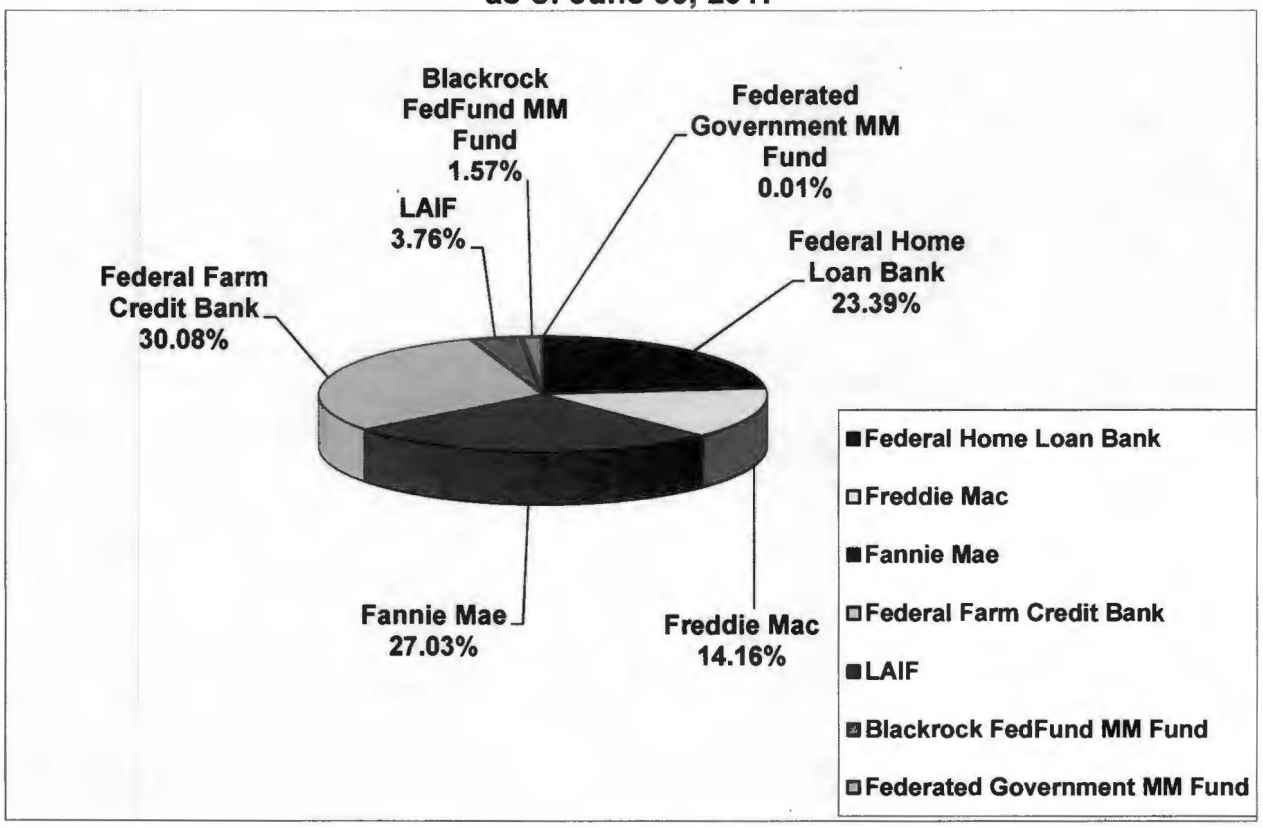
To manage liquidity, the Irvine Pooled Investment Portfolio is invested in Local Agency Investment Funds (LAIF), Federated Government Obligation money market fund, and the Blackrock FedFund money market fund. Chart 1 shows the asset allocation of the portfolio.

Irvine Pooled Investment Portfolio
Chart 1 - Asset Allocation
as of June 30, 2017



To diversify, the City purchases securities from several different federal agencies. The four Federal Government sponsored entities the City owns are: Federal National Mortgage Association (Fannie Mae), Federal Home Loan Mortgage Corporation (Freddie Mac), Federal Home Loan Bank (Home Loan), and Federal Farm Credit Bank (Farm Credit). Chart 2 identifies portfolio holdings by issuer name.

Irvine Pooled Investment Portfolio
Chart 2 - Allocation by Issuer Name
as of June 30, 2017



Another key component in portfolio management is to ensure that the City has enough funds on hand to meet current expenses. As of June 30, 2017, the overnight to 6-month liquidity level for the Irvine Pooled Investment Portfolio was at 14.32 percent versus 13.19 percent last quarter. Chart 3, on the following page, is an aging of investment maturities up to 5 years (the maximum maturity allowable by policy and state code) of the Irvine Pooled Investment Portfolio.

Irvine Pooled Investment Portfolio
Chart 3 - Aging of Maturing Investments (Maturity Value)
as of June 30, 2017

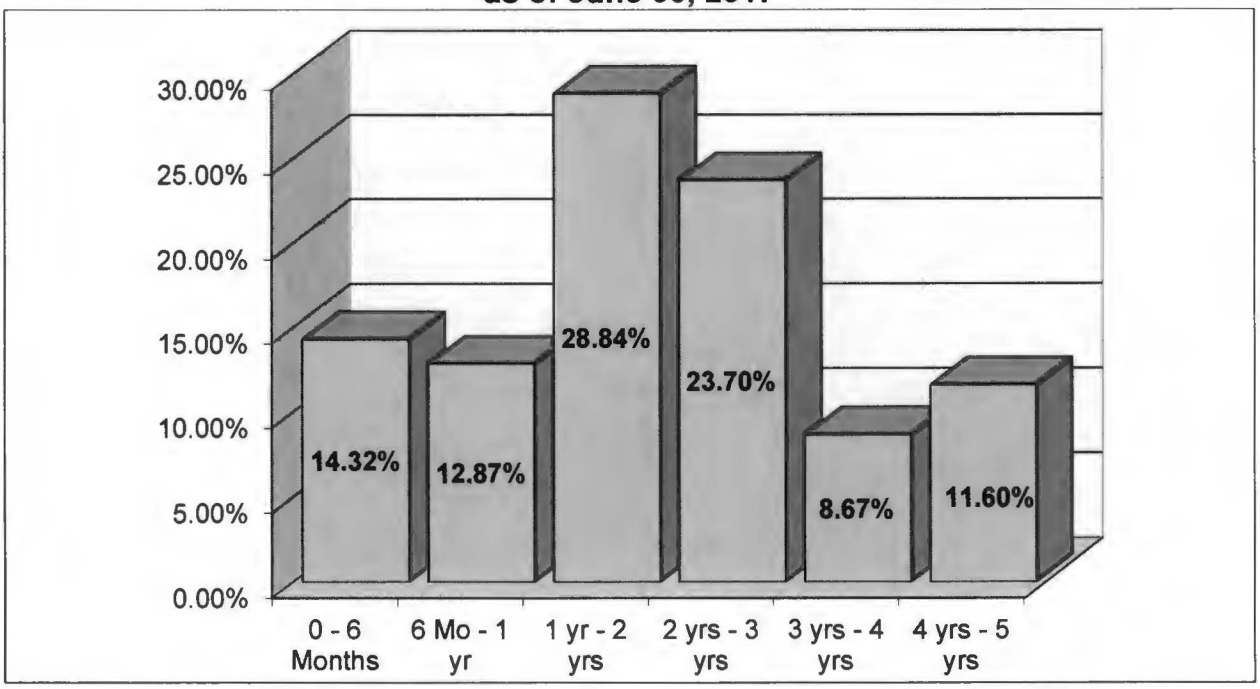
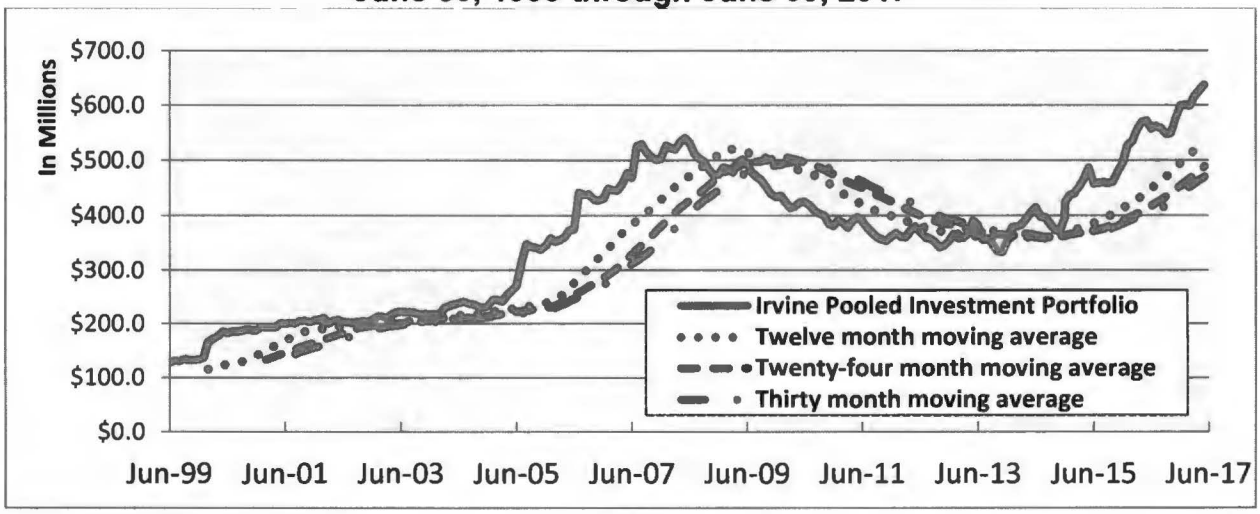
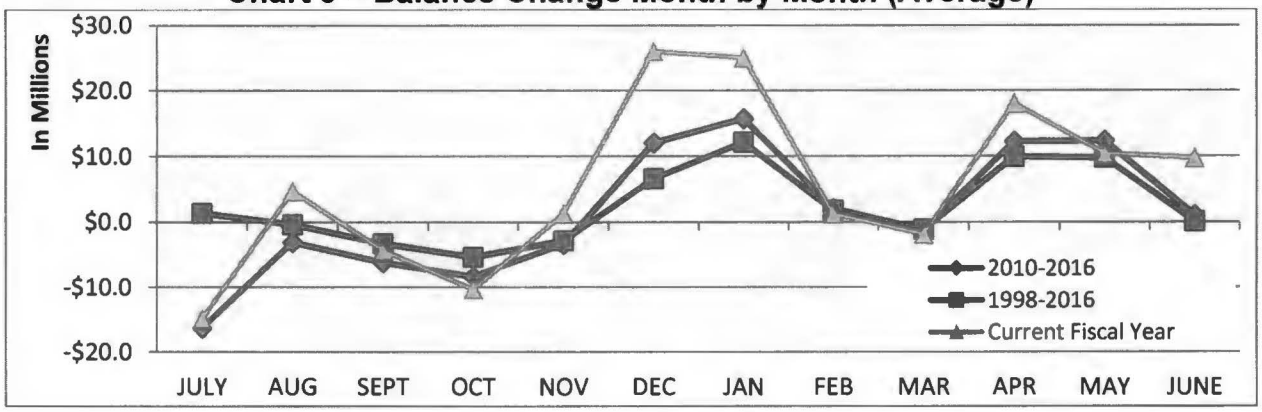


Chart 4 and Chart 5 show the volatility and cyclicality of the Irvine Pooled Investment Portfolio fund balance and cash flows between June 30, 1999 and June 30, 2017.

Irvine Pooled Investment Portfolio
Chart 4 - Portfolio Balance
June 30, 1999 through June 30, 2017

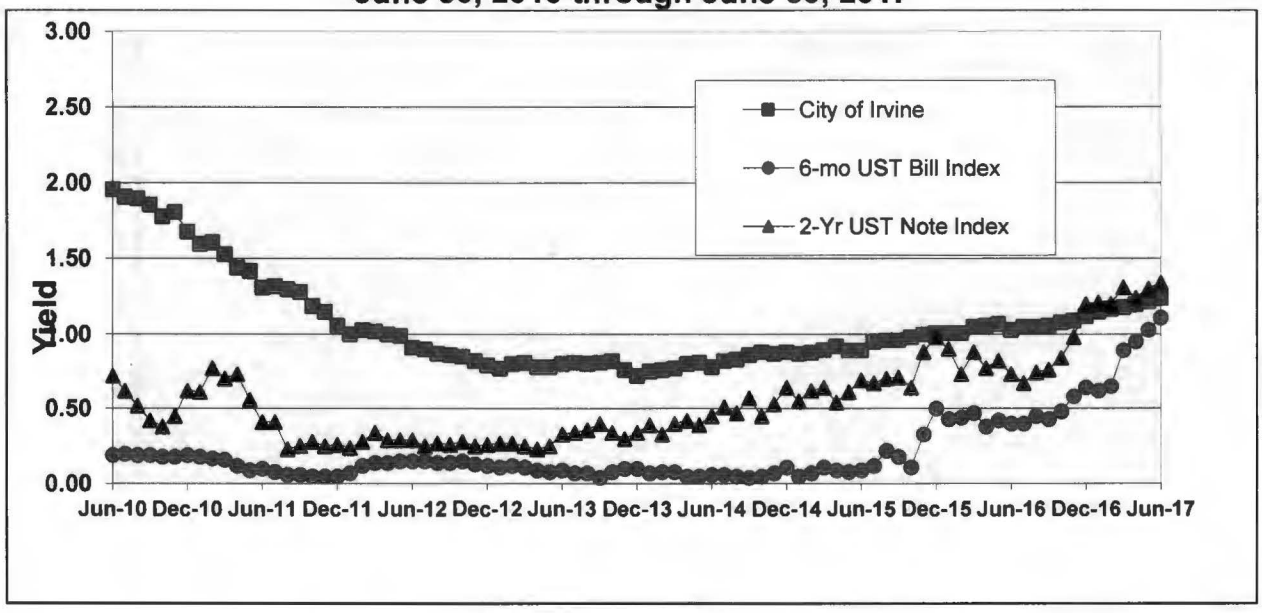


Irvine Pooled Investment Portfolio
Chart 5 – Balance Change Month by Month (Average)



To gauge performance, the City compares the Irvine Pooled Investment Portfolio's yield to maturity against two benchmarks set in the City's Annual Investment Policy: the 6-month United States Treasury (UST) Bill Index and 2-year UST Note Index. The benchmarks are used as a measure of the portfolio against market movement. Chart 6 compares the average yield to maturity of the portfolio to these benchmarks, and shows the spread (difference between the index and the yield to maturity) for the past seven years. The portfolio's yield is higher than the 6-month UST by 0.13 percent and lower than the 2-year UST by 0.10 percent.

Irvine Pooled Investment Portfolio
Chart 6 - Yield to Maturity Compared to Assigned Benchmarks
June 30, 2010 through June 30, 2017



Bond Proceeds Fund Portfolio

The Bond Proceeds Fund Portfolio contains special district construction and administration funds that are not held by a trustee. These include older bond issues, and funds on hand to finance the City's special district administration. Investment strategy differs in the Bond Proceeds Fund Portfolio from the Irvine Pooled Investment Portfolio due to the different cash needs between the two. The Bond Proceeds Fund Portfolio requires greater liquidity to meet debt related payments. The account balance in the Bond Proceeds Fund Portfolio fluctuates from quarter to quarter due to the timing of property assessment collections from the County of Orange and subsequent distributions. Several times a year, the portfolio receives special assessments and tax levies collected by the County. The special assessments and tax levies contain three major components:

(1) The collections from the various Assessment Districts (AD), Reassessment Districts (RAD) and Community Facility Districts (CFD). Upon receipt, the City transfers these funds to the Districts' bond trustees.
(2) The collections for the guaranteed maintenance amount of the Great Park CFD. Upon receipt, the City transfers this amount to the Orange County Great Park Fund.
(3) The collections for the Districts' construction and administration funds held and managed by the City. This portion remains in the Bond Proceeds Fund Portfolio.

Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the Bond Proceeds Fund Portfolio as of June 30, 2017 was $28,832.

Bond Proceeds Fund Portfolio
Rolling 12-Month Quarterly Comparison

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Book Value	$4,605,000	$4,609,437	$7,608,436	$760,436
Market Value	$4,600,122	$4,605,639	$7,604,053	$760,669
Unrealized Gain/(Loss)	($4,878)	($3,798)	($4,384)	$233
Unrealized Gain/(Loss) as % of Book Value	(0.11%)	(0.08%)	(0.06%)	0.03%
Average Yield To Maturity	0.98%	0.82%	0.72%	0.63%
Liquidity 0–6 months	100.00%	100.00%	100.00%	100.00%
Average Days To Maturity	1	1	1	1
Modified Duration in Days	1	1	1	1
Fiscal Year to Date Income	$28,832	$19,449	$6,984	$5,783

Special District Funds Portfolio

The Special District Funds Portfolio contains project and reserve funds for 27 AD and RAD bond issues and four CFD bond issues. Investments in this portfolio are made in accordance with each bond's indenture and the strategy is based on the cash flow needs of each district. The Special District Funds Portfolio must also remain very liquid to provide project funds, when needed, as well as meet debt service payment requirements. Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the Special District Funds Portfolio as of June 30, 2017 was $2.24 million.

Special District Funds Portfolio
Rolling 12-Month Quarterly Comparison

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016
Book Value	$343,067,156	$348,802,144	$387,387,309	$371,479,758
Market Value	$342,664,495	$348,451,879	$387,100,007	$371,288,348
Unrealized Gain/(Loss)	($402,661)	($350,265)	($287,302)	($191,410)
Unrealized Gain/(Loss) as % of Book Value	(0.12%)	(0.10%)	(0.07%)	(0.05%)
Average Yield To Maturity	0.85%	0.70%	0.32%	0.30%
Average Days To Maturity	55	49	41	41
Fiscal Year to Date Income	$2,239,450	$1,423,682	$694,044	$292,016

Market Conditions

During the fourth quarter of Fiscal Year 2016-17, the yield curve flattened dramatically with interest rates increasing in the short end of the yield curve and decreasing in the long end of the yield curve. The 6-month Treasury bill yield increased 22 basis points ending the quarter at 1.02 percent. The two-year Treasury note yield increased 9.90 basis points to 1.37 percent, and the five-year Treasury note yield decreased 7.60 basis points to 1.85 percent. The flattening of the yield curve was primarily due to the Federal Reserve increasing short term rates while inflation and economic growth data weakened. The net effect to the Pooled Investment Portfolio was a slight decrease in the unrealized market value loss. The Special District Funds Portfolio's unrealized market value loss increased due to the short duration of the fund and the increase in short term market rates.

In comparison to interest rates at FY 2015-16, benchmark Treasury interest rates increased approximately 76 basis points. FY 2016-17 began with the United Kingdom's vote to withdraw from the European Union, which resulted in interest rates moving dramatically lower. Interest rates surged in the second quarter FY 2016-17 as economic optimism rose in the belief that the new administration would reform taxes, reduce burdensome regulations, increase fiscal spending, and overhaul the healthcare system. Additionally the Federal Reserve raised the Fed Funds rate by 25 basis points on December 14, 2016, citing that "the labor market has continued to strengthen and that economic activity has been expanding at a moderate pace since mid-year." The Federal

Reserve increased short term borrowing rates again on March 15, 2017 and June 14, 2017 citing that "information received since the Federal Open Market Committee (FOMC) met in June indicates that the labor market strengthened and that economic activity has been expanding at a moderate rate." Federal Reserve President Janet Yellen has indicated that the FOMC will raise rates again in calendar year 2017 and discussed plans to begin reducing the Federal Reserve's balance sheet.

During the third and fourth quarter of FY 2016-17, economic data, while positive, remained tepid. Inflation data also increased, but are still below the FOMC's 2.0 percent target rate. The U.S. Personal Consumption Expenditures (PCE) index, which has consistently averaged less than 2.0 percent, and the core consumer price index (CPI) have averaged 1.80 percent for the past twelve months.

Gross Domestic Product (GDP) averaged 1.90 percent for the past four quarters and continues to improve modestly. The U.S. unemployment rate improved to 4.3 percent from 4.70 percent year-over-year (YoY) and the underemployment rate improved to 8.40 percent from 9.70 percent YoY. The increase in average hourly earnings ended the fiscal year at 2.50 percent, down from the December 31, 2016 increase of 2.90 percent.

In conclusion, FY 2017-18 will begin with the fundamentals for subdued growth and low inflation remaining intact. These include a complex combination of aging demographics, onerous dependency ratios (nonworking versus working population), policy paralysis in Washington, excess capacity in many sectors, the rapid change in technology and mechanization, and excessive debt burdens which will continue to constrain global growth. Additionally, it is anticipated that the Federal Reserve will continue tightening despite a slower economic growth rate, declining inflation and credit/money supply growth data, and a flattening yield curve. Quantitative easing and monetary stimulus have inflated various asset classes that may rebalance as the Federal Reserve increases short term rates.

ALTERNATIVES CONSIDERED

None. The Treasurer's Report is intended to provide historical information about the City's investment portfolios. Pursuant to the City's Investment Policy, the Treasurer is required to submit quarterly Treasurer's reports to the City Council.

FINANCIAL IMPACT

Fiscal year-to-date investment income for the Irvine Pooled Investment Portfolio, Bond Proceeds Fund Portfolio, and Special District Funds Portfolio totaled $8.09 million with investments structured for security and liquidity.

REPORT PREPARED BY Don Collins, City Treasurer

Attachment: Summary of Pooled Investment Portfolio Book Value by Fund

City of Irvine

Summary of Pooled Investment Portfolio Book Value by Fund

As of June 30, 2017

General Reserve Funds	$	138,829,172
Capital Projects Funds:		
Capital Improvement Projects		26,414,622
Irvine Business Complex		83,630,373
North Irvine Transportation Mitigation		78,052,680
Orange County Great Park Development		882,036
Park Development		16,532,571
Total		205,512,282
Special Revenue Funds:		
Air Quality Improvement		544,856
County Sales Tax Measure M		3,775,971
Fees and Exactions		12,589,841
Gas Tax		11,820,708
Grants		3,805,066
I Shuttle		785,713
Local Park Fees		109,939,465
Maintenance District		2,964,088
Major Special Events		113,557
Orange County Great Park		86,964,881
Slurry Seal Fees		614,128
System Development		23,788,121
Total		257,706,395
Internal Service Funds:		
Equipment & Services		15,486,261
Inventory		130,354
Self-Insurance		18,868,346
Total		34,484,961
Permanent Fund:		
Senior Services		179,095
Senior Services Endowments		495,406
Total		674,501
Total Pooled Investments at June 30, 2017	$	637,207,311

Note: Funds are as presented in the City's Comprehensive Annual Financial Report (CAFR)

ATTACHMENT